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✦ *A Year in the*
INFANT SCHOOL



“Heaven lies about us in our infancy.”

Wordsworth.

I. THE CHILD AND HIS PET LAMB

(See *Lambkins and Sheep*, page 89)

Additional Object Lessons suggested by Picture, "The Lamb"

MOTTO.—

"May brings flocks of pretty lambs,
Sporting round their fleecy dams."

Old Rhyme.

PREPARATION.—Talk about animal pets. Why children make pets of young animals. Pets preferred by different children, &c.

PRESENTATION. Simple description of lamb. Children's drawing of lamb. Long legs of lamb in comparison with grown sheep. Difference in the case of babies. Contrast lamb with calf or other young animal.

Habits.—Sportiveness of lambs. Their tendency to wander. Their enemies. Care of lambs. In our country danger to young lambs from snow-storms, &c.

ASSOCIATION.—Always with what is gentle, meek, lovable, harmless, innocent. Lamb as type of mildness and goodness. Bible references, &c.

FORMULATION.—

"What makes the lamb love Mary so?"

The eager children cry;

"Why, Mary loves the lamb you know,"

The teacher did reply."

APPLICATION.—The qualities to cultivate if we wish to be loved.

Phonetics

"B" silent after "m". Give examples; make words; use words in sentences.

Number

Represent, say, 12 on ball-frame. Get children to make 12 in as many ways as possible. Should be able to add and subtract numbers, and to give the factors. Construct 12 in various ways with counters. Break up 12 into as many double distinct parts as children can. Form as many combinations of numbers that make 12 as possible.

Story

"The Sandman." "Monday." *Hans Andersen's Favourite Fairy Tales.* "The Fable of the Wolf and the Lamb."

Read to children "The Last of the Flock" (Wordsworth).

Song—"LITTLE BO-PEEP"

Game—BA, BA, BLACK SHEEP

Reading for Blackboard

Story of lost lamb found by little girl, and taken home and cared for by her. Lamb sold later. Later still travels back many miles to reach his young mistress. Child's joy.

Poetry for Recitation

"Mary had a Little Lamb" (Mary Howitt).
"The Pet Lamb" (Wordsworth), verses 1, 2, 9, 10, 11

Exercises for Sense Culture

Free-arm Drawing: Sheep. Paper-folding, Paper-cutting, &c.

Object Lesson: Wool.

PREPARATION.—Talk about clothes. Differences in summer and winter clothes. What happens to animals, &c. Develop as above.

Another way of utilizing picture is to show it to children, and, by carefully arranged questions, get them to develop the story the picture tells them. Get them then to tell it.

A YEAR IN THE INFANT SCHOOL

A Fully Correlated Scheme of Work

BY

BLANCKE BLOOMER

(MRS. J. P. ACKROYD)

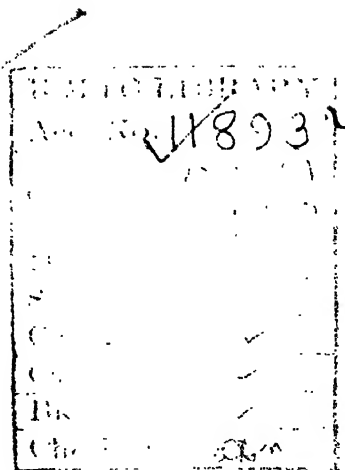
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With Illustrations in Line & in Colour by

STEPHEN T. DADD, A. FAIRFAX MUCKLEY
& Others

*The Pianoforte Accompaniments
to the Songs and Singing Games specially arranged by*
HARRY COLIN MILLER, Mus.Bac.

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THOUGHT FOR THE YEAR

I. FOR CHILD

“All things bright and beautiful,
All creatures great and small,
All things wise and wonderful,
The Lord God made them all.

“Each little flower that opens,
Each little bird that sings,
He made their glowing colours,
He made their tiny wings.

“The cold wind in the winter,
The pleasant summer sun,
The ripe fruits in the garden,
He made them every one.

“He gave us eyes to see them,
And lips that we might tell
How great is God Almighty,
Who hath made all things well.”

—C. F. Alexander.

THOUGHT FOR THE YEAR

II. FOR TEACHER

“Let us take our proper station,
We, the rising generation,
Let us stamp the age as ours!

“We shall be what you will make us:
Make us wise and make us good!
Make us strong for time of trial;
Teach us temperance, self-denial,
Patience, kindness, fortitude!

“Look into our childish faces;
See ye not our willing hearts?
Only love us, only lead us;
Only let us know you need us,
And we all will do our parts.”

—*Mary Howitt.*

PREFACE

The object of this book is to supply a scheme of work in which the method of transition from one season to another shall be like that of Nature herself—gradual and harmonious. The work for one week centres round the object, or so-called nature, lesson. (Most of the kindergarten occupation lessons, if properly taken, become true nature lessons.) The poetry, singing, play, and manual work are all correlated with the object lesson. Forcing of any kind is contradictory to the principles of the “father of the kindergarten”, Froebel, and therefore finds no place in a well-balanced infant school. I have endeavoured to show that lessons may be correlated without any of that straining of ideas which is not consistent with the true kindergarten spirit.

Not only should the lessons for the week bear a close relation to each other, but the subject for each week should have some connection with that of the preceding week. In this way there will be one main idea current throughout a season's work. Not only that, but the central thoughts underlying the lessons of each season must have a close relation to each other. Thus, every lesson in the real kindergarten helps to make one complete whole. Each occupation, story, poem, &c., has its proper place, and to change the natural sequence is to destroy the value of the system. In my opinion the value of a scheme of work lies in the unity of thought which flows through the year, seasons, and weeks, and down to the individual lessons of the curriculum.

The notes for the object lessons are not intended to be comprehensive; neither are they written in language suitable for use with young children. They merely serve to show the lines upon which the teacher may go. The poems given may be supplemented from the stores of gems of poetry which every teacher ought to possess, but which, owing to the law of copyright, I have been unable to reproduce. The same holds good with reference to the songs. There need be no unnatural stretching

of ideas to obtain songs which bear directly on the subject for the week, any song which is in harmony with the general impression or main idea of the period's work, and which is tuneful and dainty, may be taught. For example, in the "Coal" lesson (see Winter Scheme), the song "Dream of angels, little one" (words by George Cooper, and music by Franz Abt) is not directly about coal, but it calls forth a picture of a mother rocking her baby by the warm fireside, and it helps to fill out the main thought of "The Home" period. It goes even farther than this in that the sleeping child can be compared with the resting plants; thus the song assists in developing the central idea of the season, viz. that winter is a sleeping time. To-day, with the wealth of song treasures so great, there can be no difficulty in finding sweet songs which are good from the standpoint of musical worth and suitability of subject and language.

The games are in most cases original, and are such as can be played in the ordinary central hall. They have been composed with a view to providing for and cultivating the activity and playfulness, as well as the strong social tendency Froebel held to be three of the special characteristics of childhood. The stories are, I think, suitable in their conception and variety to young children. Nature stories and fairy tales have been interspersed, and myths and legends also form part of the scheme.

The following scheme, with slight alterations and additions, has been used with considerable success in a town infant school. It is not intended that teachers should use this work as it is presented; rather than that, I would advise them, in the words of a well-worn phrase, to adapt not adopt. There must be other subjects for the nature lessons which, on account of local conditions and environment of the children, the teacher would do well to take instead of some of those given here. If the work achieves no other end than to show that all work in the infant school can be successfully and naturally correlated, it will have been of some use.

I would like to mention Miss H. J. Martin, Lecturer in Kindergarten at Kennington College, to whose enthusiasm and attractive teaching I owe much of the spirit which has prompted and enabled me to compile this work.

MABEL BLOOMER (Mrs. Ackroyd).

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Spring Period

Central Idea: "Nature's Awakening"

"Sweet Spring, full of sweet days and roses,
A box where sweets compacted lie."—*George Herbert.*

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"From bright'ning fields of ether, fair disclosed,
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As I have seen in one Autumnal face."—*John Donne.*

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Winter Period

Central Idea: "A Sleeping Time"

'The Flowers do fade, and wanton fields
To wayward Winter reckoning yields.'—Sir Walter Raleigh.

WINTER SLEEPERS

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SPRING PERIOD



"Blows the thaw-wind pleasantly,
Drips the soaking rain;
By fits looks down the waking sun;
Young grass springs on the plain;
Young leaves clothe early hedgerow trees;
Seeds, and roots, and stones of fruits,
Swollen with sap put forth their shoots;
Curled-headed ferns sprout in the lane;
Birds sing and pair again.

"There is no time like Spring,
When life's alive in everything,
Before new nestlings sing,
Before cleft swallows speed their journey back
Along the trackless track—
God guides their wing,
He spreads their table that they nothing lack—
Before the daisy grows a common flower,
Before the sun has power
To scorch the world up in his noontide hour."

—Christina G Rossetti.

Central Idea: "NATURE'S AWAKENING"

AWAKENING PLANTS	{	Bulbs. Hazel and Willow Catkins. Snowdrop and Crocus. Opening Leaves.
------------------	---	--

GROWING "CHILDREN"	{	Birds and their Nests. Eggs and Chickens.
--------------------	---	--

AWAKENING ANIMALS	{	Earthworms. Frogs and Tadpoles.
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"GROWING" WEATHER	{	Clouds and Rain. The Wind.
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SPRING PERIOD

Object Lesson—BULBS

APPARATUS REQUIRED.—An onion for each child, growing bulb plants, and blackboard drawings.

PREPARATION.—Let the children talk of melting snow, warm sun, thaw, rains, &c. Spring is the waking time for all nature. The tiny baby plants inside the bulbs are answering the sun's invitation to grow. If the teacher has kept a record of the growth of the bulbs in the classroom, with drawings of such items as first appearance of roots, first green shoots, &c., the children's minds will need little preparation further than a short chat on waking time. What else does the sun awaken? How does the sun encourage plants to grow in spring?

PRESENTATION. Bulbs are not all of the same size, shape, or colour. The hyacinth sometimes looks purple, while the onion is yellow outside.

(i) *Outside Appearance.*—Let children describe their bulbs.

(a) *Thin, Dry, Crisp Leaves Outside.*—These are the coats which protect the insides of the bulbs from insects which might injure them.

(b) *Small Roots at the Base of Bulb.*—These will grow longer if the bulb is put in the earth, and will help to fasten the plant there. Roots drink up the food for the growing plant.

(c) *The Shrivelled Top.*—This is part of last year's stem.

(ii) *Inside of Bulb.*—Teacher cuts the onions alternately vertically and transversely, so that all the children may see both sections.

(a) *The Young Plant.* This is right in the middle, and can be easily distinguished by the difference in colour from the other part of the bulb. It is the most precious part of the bulb, and so it is farthest away from all that might hurt it. Its enemies are frost, cold, and insects. The young plant, with every part ready for development, sleeps here all the winter.

(b) *Thick, Fleshy, Scale Leaves.*—These wrap the plant round closely (best seen in transverse sections). All the winter they have been storing up food for the baby plant and keeping it warm. These leaves are full of juice as the children see them, but when the plant grows it draws the moisture out and leaves them thin and dry. Show the shrivelled bulb from which a fully developed flower has grown. Contrast with young bulb.

(c) *Hard Part at the Base.*—This is where the thick "cupboard leaves" grow from. When all the food has gone out of them, the roots must drink nourishment out of the earth. This is stored in the hard part, and goes right up the flower stem into the leaves.

(iii) *How a New Bulb Comes.*—When the work of the plant is done, i.e. the flower has developed, pollination taken place, and seeds grown, the flower dies. For a time the roots continue to draw nourishment from the soil and the leaves from the air. All the foodstuff in the stem and leaves then sinks down again and stays just at the top of the old bulb. Here it forms a new bulb for the next year.

A YEAR IN THE INFANT SCHOOL.

(iv) *Characteristics of Bulb Plants.*—Roots soft and thick; leaves long and swordlike, often fleshy; flowers varied, some brightly coloured, others white; sepals of flowers usually not green.

ASSOCIATION.—Let the children plant some onions in earth. Show that the care of the young plant which is taken by the thick scale leaf is like their mother's care of the baby at home. She wraps it up to keep

it nice and warm and feeds it until it is old enough to look after itself.

FORMULATION.—“Be kind to others and protect the weak.”

APPLICATION.—Records on brown paper can be started and kept about the bulbs planted or examined during Nature Lesson. Songs, games, and recitations relating to lesson can be gone through. For further application see kindergarten occupations.

Phonetics

PART I.—*Breathing Exercise.* PART II.—*The Sounds “p” and “b”.*

(i) *Teacher produces a Pair of Bellows.*—After a short chat on their use and construction, she likens the children's lungs to them. “Although our ‘breath₄ bellows’ are not made of wood and leather, we can fill them with air or empty them as we please. See me squeeze all the air out of the bellows. Now watch while I send all the breath out of my ‘breath bellows’.” Teacher places her hands on her ribs. As she breathes out, her ribs fall and her hands sink with them.

“Tom, come and fill the bellows with air. I will fill my lungs with air. Watch my hands; they will show how big my breath bellows become.” Teacher takes a deep breath; her hands move outward with the elevation of her ribs and descent of diaphragm. “How did the bellows take in the air? We will breathe through our noses too. Hands on ribs, mouths closed; ready! In! Out!” The children stand firmly on

both feet and do this exercise several times, while a boy works the bellows in front of the class.

(ii) *Teacher shows a Pipe.*—“What is this?” All say the word. “What is the first sound to come out? How is it made?” Children describe how the lips part suddenly and breath is forced out “like a little explosion”—just like the sound father makes when he is smoking. Children print “p” in the air and repeat the sound. Record of lesson: Picture of pipe with “p” printed in corner.

“b” in bulb is treated similarly and compared with the sound “p”. Children tell how the “lips work harder” for “b” than “p”. They put fingers to throat and tell that “b” is started there. Teacher corrects any tacking on of a vowel sound to “p” or “b”. Record of lesson: Drawing of bulb with “b” printed in corner.

Number

The number 6.

5 + 1	
1 + 5	
4 + 2	= 6.
2 + 4	
3 + 3	

N.B.—Children have certain ways of representing numbers with counters. They always

keep to those ways, e.g. 5 is always laid like the domino 5 and never in any other way.

Teacher begins, “Make picture 5 with your counters.” (Children have mastered number 5 in previous lesson.) “We will call them bulbs. What kind of bulbs? Mr. Brown planted 5 tulip bulbs in his garden.

SPRING PERIOD

Plant your 'bulbs' in your 'gardens'." (Children lay 5 counters on desks.) "'Plant another, Daddy,' said Willie; so Mr. Brown planted one more." (Another counter laid on desks.) "Nellie, tell us the addition story." Nellie says, "Five bulbs and one more make six bulbs." "All print figure 6 in the air while I write it on the board. Now write the addition story on your boards."

1

Children write $\overset{5}{5}, 5 + 1 = 6$. "There is

another addition story on your desks. What is it, Roland? Write that on boards too."

5

Children write $\overset{5}{1}, 1 + 5 = 6$.

"Mrs. Brown went to buy some crocus corms. She got 4 purple crocuses" (children make picture 4 with counters) "and 2 yellow ones." (Children put 2 more counters down.) "How many corms altogether? Tess, tell us the addition sum and its answer." "Four corms and two more make six corms." "Print that sum on boards. Robbie, tell us the other addition sum on your desks. . . . Right! All put down $2 + 4 = 6$."

"Baby wanted some flowers too, so her mother planted 3 daffodil bulbs in one pot and 3 hyacinth bulbs in another." (Children place 3 counters on desks and add 3 more.) "How many bulbs had baby? . . . Write the sum on boards." Children write $3 + 3 = 6$.

Story—THE STORY OF NARCISSUS

Long, long ago, when birds and flowers and trees could talk, a beautiful fountain sprang up in the midst of a forest. Little sunbeams crept between the leaves and, as they fell upon it, made it shine like silver. It danced and bubbled over the rocks, sending up little showers of spray. Farther down it was as quiet as a sleeping child, and on the banks cool green moss crept to the water's edge.

One day a lad who had been hunting in the forest lost sight of his friends. While looking for them he saw the fountain shining in the sunlight through the trees. He at once turned to it, for he was hot and thirsty. As he drew near he heard the sound of the falling water, and saw how clear it was, and he was glad. He stooped down to bathe his burning forehead and to cool his hot dry lips. But as he knelt on the mossy bank and bent over the water, he saw his own form in it as in a glass.

He thought it must be some lovely water-fairy that lived within the fountain, and as he looked he forgot to drink. The bright

eyes, the curly hair, the round cheeks, and red lips were beautiful to him; and he fell in love with that image of himself, but knew not that it was his own image. The longer he looked, the more beautiful it seemed, and he longed to embrace it. But as he dipped his arms into the water and touched it with his lips, the lovely face vanished.

The youth was sad, fearing that he would never see that lovely face again. He looked round to find where its owner had fled, but looked in vain. He turned again to the water, which now ran smooth as before.

What was his delight to see the face appear once more. It smiled when he smiled, and as he spoke the lips of the face moved as though speaking too, though no sound came from them. "I love you with all my heart," said the lad. "You shall have all that is mine, if you will come out of the fountain and live with me." The image smiled and held out its arms, but still was dumb.

The lad spoke to it again, and getting no answer, he at last began to cry. The tears

A YEAR IN THE INFANT SCHOOL

fell upon the water and ruffled it so that the face looked wrinkled. Thinking it was going away again, he said: "Only stay, beautiful being, and let me look at you, even if I may not touch you." So he hung over the edge of the water and forgot everything but that lovely face. The sun went down and the moon shone, but still the lad was by the spring.

Day after day, night after night, he stayed there till he grew thin and pale, and at last died. There by the fountain his friends found the poor dead youth; and they were

sad, and sighed as they went away to make ready for his funeral. But when they came back to bear away the body, it was nowhere to be found.

Just at the water's edge, where the lad had died, there grew one strange little flower all alone. "He has been changed into a flower," they said. Then, as they wanted a name for this new flower, they said: "Let us call it after our dead friend." So they named the flower Narcissus in memory of him, and it is called Narcissus to this very day.

Other suitable stories:—1. "Legend of Hyacinthus". 2. "Sleeping Beauty"—*Grimm's Fairy Tales*.

Song—"SWEET DAFFYDOWNDILLY"

—E. Smith's *Songs for Little Children* (Curwen).

Game - 1. THE BULB FLOWERS



1. All the ba-by plants are sleep-ing, sleep-i Daf-fo-dil and snow-drop

Ve-ry qui-et they are keep-ing, keep Tucked a-way far out sight.

2. Hear the gentle breezes blowing, blowing,
Waking flowerets from their sleep;
Soon the plants begin their growing, growing,
Tiny shoots begin to peep.

3. Rain and sunshine now are waking, waking,
Crocus blue and tulip red;
All the tiny flowers are shaking, shaking
Each a dainty little head.

Directions.—A few children to represent the raindrops, some the wind, and one child on a chair, holding his hands in a circle, the sun.

Verse 1.—The remainder of the class form a ring, and crouch downwards with bent heads and tightly shut eyes. This verse must be sung very softly.

Verse 2.—The "wind children" hum softly and sweetly, whereupon the "plant children" waken, holding up their heads wonderingly. They slowly stretch themselves and push out outstretched fingers; one hand goes upwards for the shoots, and the other downwards for the roots.

Verse 3.—The "rain children" tap their hands, and the sun shines upon the flowers, who stand upright and gaily shake their arms and heads.

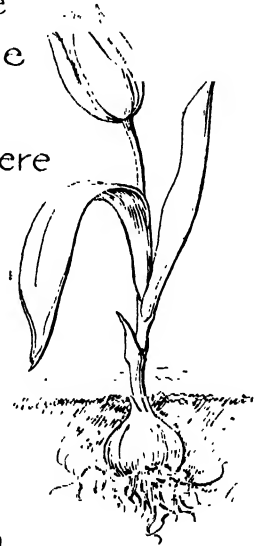
Other games are:—2. "Garden Bed"—E. Poulsson's *Finger Plays*. 3. "Little Gardeners"—W. Gullen in the *Teachers' Times*, June 7, 1907.

SPRING PERIOD

Blackboard Reading and Drawing

"I live in this little round house. All the winter, I have been asleep; but, now, I want to see the world. How hungry I am! I have eaten all the food out of these cupboards.

I had no other food all the winter. My shoots are growing green and long. Soon I shall open out. Here I am. My name is Tulip. Do you like me? I am gay. Mr. Bee likes my red petals.

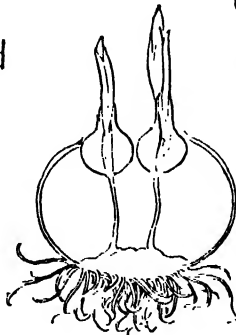


I am a Crocus Corm. Cut me in two and you will see my next year's corm.



It is just at the top of the old big corm. Can you see the road where the food goes to the baby corm?

I wear a coat, as I am glad when Spring let my pretty golden Bee is glad too."



you do, in winter. comes, and I can flower grow. Mr.

A YEAR IN THE INFANT SCHOOL.

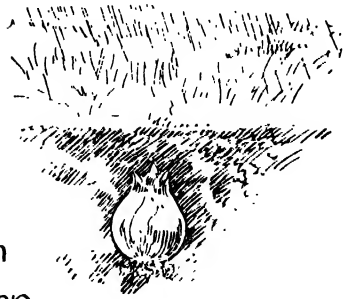
Where Daffodil came from.



Down in the dark earth, far under ground,
The bulb flower slept in a wee house round.
'Wake from your sleep!

Wake, sleepy-head!

'Tis time to get up," the rain
voices said.



The flower awoke from
her long winter's sleep,
And a tiny green shoot soon began to
peep.



Higher and higher, through the hard earth gray,
The dear little flower bud made her way.



Taller and taller, with stately
grace,

The bulb flower at last
uncovered her face.

Then, dancing and shaking her
yellow frill,

Stood a beautiful, golden
Daffodil.



M.B.

1820/1817 plan

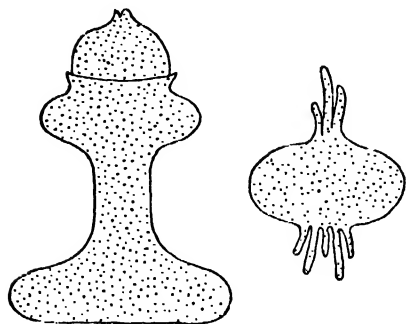
Other poems suitable for recitation:—1. "Waiting to
Grow" M. Riach's *Recitations for Infant Schools* (Blackie).



2. "March"—Wordsworth. 3. "Welcome to Spring" John Lyly. 4. "Spring-Time"—Mary Gordon.
5. "Wake, Baby, Wake!" *Palmerston Reader 1* (Blackie). 6. "To the Celandine"—Wordsworth.
7. "Daffodils"—Wordsworth.

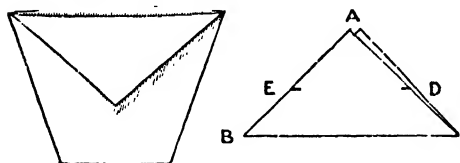
SPRING PERIOD

Paper Cutting—BULB GLASS WITH BULB



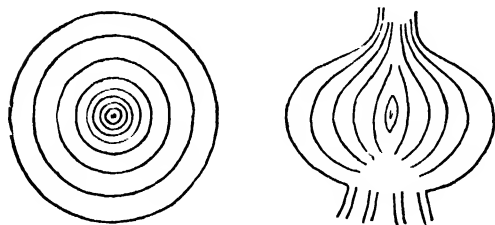
To get the two sides of glass uniform, fold paper. Let children cut from large copy pinned to black-board and from actual glass on teacher's desk. The bulb is cut from natural specimen, and is not folded. If white paper is used, the children can colour it in the painting lesson. Bulb, brown; glass, green or blue.

Paper Folding—PLANT POT



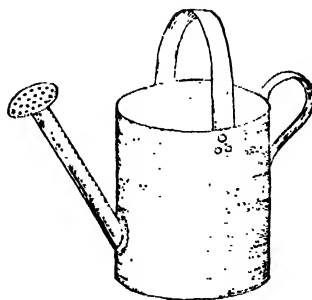
C is folded across to E, and B to D, so that CD and BE form one line. Points at A are folded over, one at each side.

Free-arm Drawing—SECTIONS OF BULB



The vertical section should be done with both hands. The arms should be held straight out, and free movement allowed to take place at the wrist.

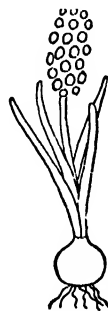
Clay Modelling—WATERING-CAN



Pieces of clay are broken off for the mouth, neck, and handles. The steps for the can are:—Circle, cylinder, handles, neck, and mouth the last. The holes should be pricked in before mouth is fastened to neck.

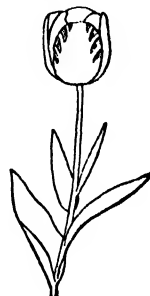
Brush Work—HYACINTH IN FULL BLOOM

Brown bulb and roots painted first. Green strokes of brush for leaves, and dainty dots of red, blue, or pink for hyacinth. Show actual plant, and let children paint from that.



Chalk Drawing on Brown Paper—TULIP FROM NATURE

Pin real tulips on board, with large sheet of white paper for background. This is sufficient copy. Tulips with yellow and red petals give the brightest results. Leaves should be filled in with long strokes.



Object Lesson—HAZEL AND WILLOW CATKINS

PREPARATION.—Each classroom should contain specimens of twigs from the common trees. The children will have noticed that the hazel cuttings have tiny tail-like “drop-pers” which are beginning to grow even before the leaf buds open. Encourage the children to bring twigs of hazel and willow. If possible, take them to some pond where a willow is growing.

PRESENTATION.—**Hazel Catkins.**—(a) *Appearance.*—The children call the male catkins “lambs'-tails” or some similar name. In winter, when there were no leaves on the hazel tree, small grey clusters appeared, at first like small grey buds. They hung down, and now at the beginning of spring they are becoming loose. They are no longer hard and dry-looking, for under the greeny grey scales little bags of yellow dust are coming out.

The female catkin is more difficult to find. It is like a large bud with a tuft of red thread-like hairs projecting from the top. The “mother catkin” is composed of a number of catkin flowers which are not at all pretty, have no scent, and have not one drop of honey. Each flower has two red hairs; there are many flowers in one green cup.

(b) *Pollination.*—Let children suggest how the flower dust is conveyed to the mother catkin flowers. They will see that the absence of honey and inconspicuous appearance will not make the female flowers attractive to insects or honey seekers. The wind has therefore to carry the pollen. This is why the catkin flowers open before the leaf buds. Children will see that leaves would hinder the pollen from falling on the catkin stigmas. The pollen is blown on the red tuft, and very soon the seed in the “seedbox” (ovary)

begins to grow. In the autumn it has become a sweet hazel nut.

Willow Catkins.—(a) *Appearance.*—The “golden palms” and “pussy willows”, as the children call them, are the male and female catkin flowers respectively. The “father catkin” is richly laden with golden pollen; the “mother catkin” is dressed in silver-grey velvet. Like leaf buds, their growth began last year in the axils of leaf stalks. When fully developed they are upright. Contrast with pendulous hazel catkins. Each catkin is composed of many flowers, and each tiny flower has a hairy leaf or bract. This bract serves a double purpose: warmth during winter, and prevention of undue loss of pollen when the wind blows in spring.

The great quantity of pollen makes the “father” catkin look like a ball of bright gold. The pollen is very sticky. There is a little “honey box” at the base of each tiny flower. Contrast with hazel catkin, which has no nectary.

The “mother catkins” grow on another shrub. They are much quieter in appearance, and are long and narrower. The “mother catkin” flower has no tiny “powder boxes” like the “father catkin” flower, but its “head” or stigma is sticky. It has no odour, but, like the male, the nectary contains a drop of honey. There are therefore many small drops of honey in one catkin.

(b) *Pollination.*—The great contrast between the hazel and willow catkins will lead the children to see at once that pollination in the case of the latter is carried on by insects. The half-famished bees, who have been making what pollen bread they could from the scanty assortment of flowers in March, crowd round the willow, attracted by its strong odour and bright pollen.

SPRING PERIOD

The honey in the female flower is an attraction for the bee, which, after a visit to the male flowers, leaves the pollen on the sticky stigma of the female flower. After this, tiny seeds begin to grow in the seedbox, which opens and sets them free when they are ripe. Each of the numerous seeds is provided with a tuft of small silky hairs. These downy tufts are the favourite linings for the nests which the birds are beginning to build about this time.

ASSOCIATION.—Associate with "Palm Sunday", the observance of which is very popular in many parts of England. The baskets

which mother uses are probably made from stems of the willow (osier). Boys' cricket bats are made of wood from large willow trees.

FORMULATION.—Catkin flowers grow before the leaves. Hazel catkins have many flowers but no honey, and so do not attract bees. Pollen is carried by the wind. Fruit of hazel catkin is a nut.

Willow catkin flowers have a strong scent and honey. Bees carry pollen to the sticky stigmas of female flowers.

APPLICATION.—See "Kindergarten Occupations" and "Blackboard Reading".

Phonetics

PART I.—*Breathing Exercise.* PART II.—*Sounds* 'sh',

(i) *Exercise for obtaining Correct Position of Body during Phonics Lesson.*—(a) Heels together (or slightly apart), hands clasped by thumbs down in front; (b) arms raised until held high above head; (c) hands separate and brought down well behind in two half-circles. The chest is thus thrown well out, and the rib muscles are free to work. Teacher shows how useless bellows would be if they could not "open out". Lungs are not of much use if they cannot "grow big with breath" on account of stooping shoulders, turned in ribs, &c.

Breathing Exercise.—Children place hands on ribs and breathe in slowly through the nostrils. They retain breath whilst teacher counts two, three, or four beats. Then exhale through the mouth. Teacher checks any lifting of shoulders during breathing-in, which shows that only the upper portion of lungs is being inflated.

(ii) "Here is a railway engine. Who has heard it when the driver lets off steam? How does it sound? All fill lungs so that

you can let off much 'steam'—ready!" The class says "s..." as teacher points to the letter "s" on the record. "How did you make the sound?" Children describe closed front teeth, tongue held clear away, and breath passing through teeth.

"Now the train is dashing along the line." Teacher shows drawing. "What does the engine say as it speeds on? Fill your lungs and sing the song of the engine." Children say "sh...", and imitate the revolving wheels with their arms. Teacher points to "sh" at the end of "dash", which is printed on record. Children tell how "sh" is made by the mouth.

"The train takes Willie Smith into the country. Here he watches the bees and listens to their song. What is it? All breathe and sing 'zzzz'." Teacher shows drawing of hive and bees; "buzz" printed in corner. "How is 'zz' made? Yes, in the same way as 'ss'; but there is something else. Feel your throats." Children tell difference between "s" and "z".

Number

Number 6 continued.

$$6 - 1 = 5$$

$$6 - 5 = 1$$

$$6 - 2 = 4$$

$$6 - 4 = 2$$

$$6 - 3 = 3$$

"Six pussy willows"—willow catkins—"grew on a branch." Children put 6 counters on desk and write figure 6 on their boards. "Each pussy had a hood to keep it warm in winter. The sun shone, and one pussy threw off her hood." Children copy teacher, who moves one counter away from the 6 on her desk and prints 1 under the 6. "How many pussies left with hoods? Write the answer down." Children draw line and subtract. "Floss, tell the subtraction sum and its answer." "One willow catkin away from six leaves five." Children print $6 - 1 = 5$. "Look at counters. Dick, tell me another subtraction sum you see there." "Five pussy willows from six pussies leaves one." Children print $6 - 5 = 1$.

"Six lambs'-tails"—hazel catkins—"were waggling on a tree." Children make number-picture 6, and write 6 on boards. "'Shake out your dust,' said the sun; but only 2 did so." Children move 2 counters away, and write 2 under the 6. "How many disobedient catkins? Work the sum on your boards. Jack, tell the subtraction sum you have worked." Jack gives, in his own words, $6 - 2 = 4$. Children print it on boards. Another child tells that 4 away from 6 leaves 2. Children print that.

"The summer went by, and nuts grew on the catkin tree. A squirrel saw 6 nuts all clustered together. He tried to take them all, but only managed to stuff 3 in his cheeks. How many were left? Sam, work all the sum with the nuts on my desk." Sam arranges the nuts as in number-picture 6. He places 3 apart and, pointing to those left, says, "There are three nuts left."

6
Another child works the sum on board 3,
3
and a third prints $6 - 3 = 3$. Children copy on their own boards.

Story—THE FAIRY TALE OF THE WILLOW CATKIN SEEDS

Queen Catkin-Flower lived inside Grey-Catkin City. It is true she was a queen, for she wore a double stigma crown. All through the winter she had slept soundly, wrapped up in her warm green bract gown. When spring came she drew herself out and looked around. "Oh! it is good to be alive in Spring. How happy I am!" she said. But her happiness did not last long, for although she was a queen and wore a crown, she was very very lonely. "Ah!" she sighed, as

she looked in her empty seed cradle, "if only I had a baby princess seed, what joy that would be for me! How I would care for her, and shield her from the cold winds and rain!" As the days passed her loneliness grew worse, and she became more and more sad. At last a Honey Bee came and asked her the cause of her sorrow. "I am lonely, so lonely," she said; "I have no child to love. Perhaps if I had some golden pollen dust I might buy one; but all the people in

this Grey-Catkin City are poor like myself; they have not one grain of golden pollen." "You have a kitchen full of honey," said Honey Bee, "and, if I may help myself to it, I will see if I cannot bring you some golden dust." Queen Catkin-Flower was so pleased that she said Honey Bee might take as much as he wanted; but first he must pay for it with the golden flower dust she so much wanted.

The Honey Bee flew away to Golden-Catkin City. This was a very gay and happy place, for every Catkin-Flower in it had two bags of gold dust for his very own. There were many green-bract cloaks in this city, for every Catkin-Flower had one to keep his golden treasure from being lost or stolen. So much gold was there, that long before Honey Bee reached the Golden-Catkin City he could see it glittering in the sunshine. At last he came to the place where King Catkin-Flower lived, and asked permission to get some honey from the King Catkin-Flower's kitchen. "Oh, how rich you are!" said Honey Bee, thinking of the sorrowful Queen he had just left. "Rich I am, but very sad," said the King of the Golden City, "for with all my treasure there is no happiness. I have no son to inherit it." The Honey Bee said, "Give me your golden pollen dust and you shall be made happy by having a son." King Golden Catkin-Flower opened his two anther treasure boxes and poured out all his gold on Honey Bee's back.

The Bee flew straight to Grey-Catkin City; here he found the Queen as sad as ever. Without saying a word he poured all his precious burden on her double stigma-crown. Queen Catkin-Flower was so startled that she began to tremble, and would have lost some of the shining gold, had not the green bract robe kept it from falling to the ground. "Do not move," said the Honey Bee, who was helping himself to the honey in the Queen's kitchen; "wish, and the first wish

you have shall be granted." "Oh!" said Queen Catkin-Flower, shaking with excitement, "I wish for a little daughter." "Look in your seed cradle," said the Honey Bee, and, having had enough honey, he flew away. The Queen was so happy, that she feared to look as the Bee had said, lest it should all prove a dream, and there be no little baby Princess after all. At last she peeped, and found, to her great delight, a tiny wee baby daughter in her little seed cradle. The golden pollen dust had disappeared from her crown, but she did not care; nothing mattered now that she had a little daughter. Soon a young Prince Catkin seed came in her little nursery, and several others followed. Queen Catkin-Flower was as happy as could be.

One day the Queen asked the Sun and Mother Earth to take care of her seed-children, and give the Plant Nurse all the food she required for them. "For," she said, "I am growing old. Soon I shall die and leave my growing seeds; but I can die happy, for the wish of my life has been granted me." King Catkin-Flower of the Golden City was still sad, for he did not know that he had a son—the little Prince Catkin seed in the Queen's nursery. One day the Honey Bee told him. "Now I am satisfied. The gold pollen dust I gave you has bought me a son and heir. I am too old now to live longer, but I am very happy." One day he died, and soon after Queen Catkin-Flower died also.

The little seed children grew larger and larger, until their ovary nursery was too small for them. So one day they burst open the doors and flew out. "Where had their wings come from?" do you say. They had no wings, but floated off by their silky hair, which had grown while they lived in the nursery. The wind gave a gentle puff, and they sailed away in all directions. The young Princess Catkin-Seed flew to the earth

near a rippling brook, and the young Prince Catkin-Seed floated across to the other side. The warm earth sheltered them from cold during the long winter until the next springtime came. They shot up into young catkin plants strong and well, for the Mother Earth had cared for them as she promised the Queen Catkin-Flower.

After some years, when Princess Catkin-Plant was grown up--so old that other Honey Bees visited her catkin cities--she told this same story to her little seed children, and made them long for the time when they, too, should fly out into the wide world.

Song—"THE HAZEL BY THE RIVER SHAKES OUT HER POWDERY CURLS"

—*Boston Songs and Games* (Curwen).

Game—THE CATKIN SHOP

Tune—"Three Crows".

The musical notation is written on three staves. The first staff begins with a treble clef, a key signature of one flat (B-flat), and a 4/4 time signature. The melody consists of eighth and sixteenth notes. The second staff continues the melody with similar note values. The third staff features a more complex rhythmic pattern with beamed sixteenth notes and rests. The lyrics are written below the staves, aligned with the notes.

'What the breeze? Oh, know it well, we work-ing bees, Oh, buz-z-z-z-z." They fly to the willow trees, ' Now give us of ey, please." And they er-ri-ly Buz-z-z-z-z."

"What will you give us for our honey?"

Then said the catkin trees;

"Before we sell show us your money,

At once now, if you please."

"To pay you for a drop of honey,

We'll give you golden pollen money."

Then all buzzed so merrily—Buz-z-z-z-z.

3. Each busy bee gets one wee drop,

Oh buz-z-z-z-z.

They love the willow catkin shop

Oh buz-z-z-z-z.

They buy till they can buy no more,

Then fly back with their precious store,

And they all buzz so merrily—Buz-z-z-z-z.

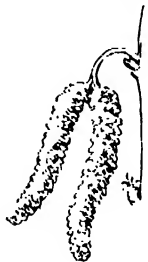
Directions.—The "catkin shop" is near a brook, which can be represented by a chalk line on floor. The children hang their arms for branches of willow tree. Other children buzz round and ask tree children for honey. Each "bee" points to pollen on its back in verse 2. The exchange of pollen for honey should go on briskly until verse 3, when the "bees" fly back to their hive—a ring of five or six children in one corner of room.

Blackboard Reading and Drawing

I am Pussy Willow. Do you like my fur kittens? They never frisk about. What do you think they are? Just a bunch of tiny flowers. Here is one. See the two powder boxes. They are not really so big. Each flower has a leaf-coat, and best of all, a honey box.

When Mr. Bee comes for honey the powder boxes shake some sticky powder on his back. He takes it to another willow. Do you like my sweet scent?

What are these long
They are Father Hazel
the golden pollen.
off on these little



curly things?
Catkins. Look for
The wind will blow it
flowers.

See their hair; it is red.
touches it a baby seed begins
to grow. By and bye the red
haired flowers die, and the baby
seed grows and grows. Next Autumn
it will be a sweet hazel nut.



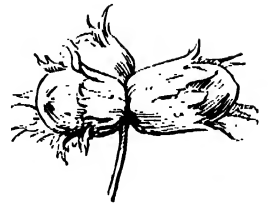
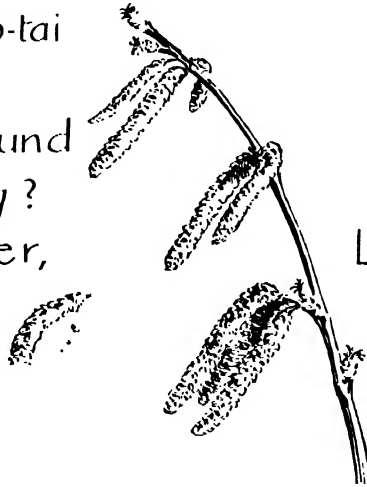
Mr. Squirrel likes a nut
for dinner."



Spring Voices.

What do the gusty Spring winds say ?
 "Get ready for the Summer."
 We're waiting for her, bring her soon ;
 She's such a tardy comer!

What do the lamb-tai
 catkins say:
 When to the ground
 they're falling ?
 "Our work is over,
 When Autumn
 winds are
 calling."



Look for nuts

What do the tender leaf-buds say
 Between the April
 showers ?
 Our work's beginning;
 soon we'll grow
 To blossoms, leaves
 and flowers."



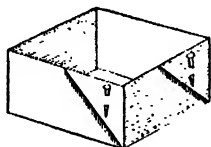
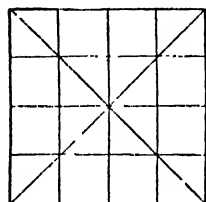
M.D.

Paper Cutting—WILLOW AND HAZEL CATKINS



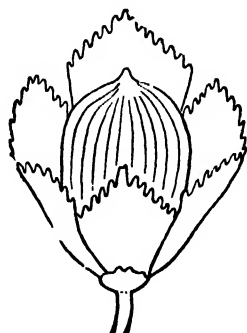
Twigs cut out of brown paper, and catkins from yellow or green. Catkins pasted on twig—not to be cut in one piece with twig, or this exercise will be too difficult.

Paper Folding and Modelling—BOX FOR HAZEL NUTS

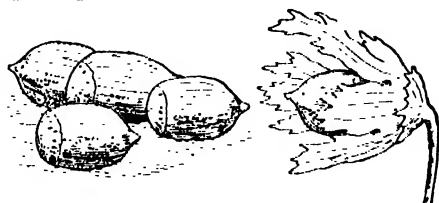


The above are the lines necessary for this model. The corners are fastened with paste or tiny pins.

Free-arm Drawing—CONVENTIONAL HAZEL FRUIT



Clay Modelling—HAZEL NUTS, WITH AND WITHOUT LEAVES, FROM NATURE



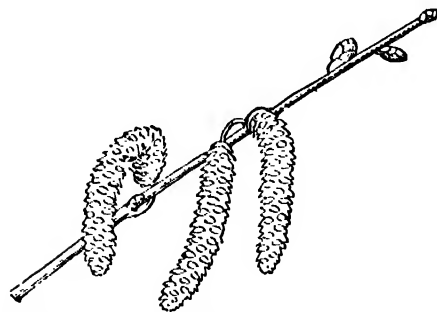
Modelling to be done from nature; markings done with pricker. Leaves cut with clay-modelling knife from thin cake of clay and put in form of cup, into which a nut is fixed.

Brush Work—SALLOW WILLOW CATKINS FROM NATURE



If each child is given a small twig bearing catkins, and paint, in divided saucers, of the following colours: purple brown for stem, very pale green for catkins, and yellow (deep chrome) for pollen, they can copy the real twig on paper. This allows for a certain freedom in the use of colour.

Chalk Drawing on Brown Paper—HAZEL CATKINS FROM NATURE



Stalk dark grey, catkins pale green, thickly dotted with yellow. Signs of original observation deserve encouragement and praise.

Object Lesson—SNOWDROP AND CROCUS

PREPARATION. --Have snowdrops and crocuses growing in classroom. Refer to previous lesson on bulbs. Get the children to bring as many of these flowers as possible. If there is a park or public place near where these flowers can be seen growing, take the children for a visit.

PRESENTATION. Why can the snowdrop and crocus blossom so early? Because they have a store of food at hand, and do not need to wait until their roots grow long. Children will remember that the bulb is a storehouse. Compare the snowdrop bulb and crocus corm.

(a) **The Snowdrop Bulb.** The children should watch the teacher strip away the outside coat of a bulb. The remainder is cut in two vertically. In the middle is the baby plant, and round it, in the thick scaly leaves, is the food. At the base of the thick leaves there is a hard portion out of which the roots grow. This part carries the liquid food to the growing plant.

(b) **The Crocus Corm.** In the crocus corm the hard part is in the centre, and is much larger. The food is stored here, so there is no need of thick fleshy leaves; there are only some thin leaves, which act as coverings for the hard "food cupboard".

(c) **The Snowdrop Flower.** Give each child a flower fully grown and one not opened. They will note the slight perfume - an attraction for the bees. They count the six white leaves --three outside "cup leaves" (sepals) and three inner leaves (petals) streaked with green. Why are the cup leaves white? --So that the hive bees can see the flowers readily. What are the green markings?--Paths for the bee to go down leading to the honey, which is near the seed-box.

The snowdrop hangs its head--Why?--The wind, rain, and insects might destroy the flower. Why is the "neck" so slender?--The head can more easily swing about when the wind blows. If the neck were stiff, instead of bending with the wind, it might snap. When the snowdrop is young it does not need to hang its head to keep out the rain, because it is wrapped in a sheath; but as soon as the flower escapes it hangs downwards.

The Position of the Powder Boxes.--This must be seen by the children, who will find that when the bee seeks honey the anthers are in such a position that he must get the pollen on his back, and, visiting the next flower, leave some of it behind. Cross-pollination is thus ensured.

The Seedbox. --Teacher should make a large drawing of the section of the seedbox. The ovary should be cut vertically and across. The children will see the three "rooms", with the two seeds fastened in the inside corner of each "room".

(d) **The Crocus Flower.** --There are six brightly coloured flower leaves, three outside (sepals) and three inside (petals), which seem to join into a tube. Each leaf is pointed as if to more easily force a way through the earth, cf. sheath of the snowdrop. Cup leaves and flower leaves are all the same colour. Why? Compare with the snowdrop. The flower leaves are very delicate. Note the position of the stamens. What is the use of them? These turn outwards, while the long style with its fringed stigma is higher than they. Why? The bee alights on the stigma, leaves his previously collected pollen, and in seeking the honey gathers more pollen from the anthers to leave with another flower.

Cut the seedbox in two and compare with the snowdrop.

(e) **Green Leaves.**—In the snowdrop there are only two, in the crocus more. They are parallel veined. Compare with veins in leaves of daffodil growing in classroom.

(f) **Habits.**—The snowdrop opens about 9 o'clock in the morning in the early months, and closes in the afternoon just when the sun goes away. The crocus opens in the sunshine, and closes at night or in dull weather. Thus these flowers are like weather clocks.

After a few days the flowers die, especially

if their work is done, and they have been visited by the bees.

ASSOCIATION.—Connect the lesson, with its moral of purity, endeavour, and fearlessness, with the conversational, scripture, or other lessons.

FORMULATION.—There is work for all. Tiny things can be brave, and however small they may be they can do some good.

APPLICATION.—Let children tell in their own words the story of the snowdrop's winter sleep. They can draw a snow scene with a snowdrop peeping out. For other application, see "Kindergarten Occupations".

Phonetics

PART I.—*Breathing Exercises.* PART II.—*The Sounds "f" and "v"*

(i) *Exercise 1.*—Heels together, weight of body equal on each foot, hands to sides, chest well thrown out. 1st movement: Arms extended sideways, arms raised to shoulder height. Breath taken in. 2nd movement: Hands return to sides, arms still extended. Breath exhaled. (*N.B.*—These movements are taken very slowly, so as to allow deep and full breathing.)

Exercise 2.—The same movements as in Exercise 1. Teacher counts certain number of beats while arms are at shoulder height. Children retain their breath.

(ii) "Willie Smith's stay in the country is over. His box is packed, and he is waiting for the train. 'Puf-f-f', it says as it rolls into the station like a tired thing." Teacher shows record of engine with smoke issuing from chimney. Children say "f", and tell

that the sound is made by holding lower lip with upper front teeth and blowing through. They print "f" in the air with pointer fingers as they make the sound.

"The porter put Willie's box in the van." Teacher shows drawing with "van" printed in corner. Children say the word and describe the sound of the first letter. "How is 'v' made? What is the difference between the ways 'f' and 'v' are made? Yes, the teeth press the under lip harder; but there is something else. Put fingers to throat. Yes, you feel a sort of buzzing there when 'v' is made. Now say 'f'." Teacher points alternately to letters "f" and "v", and makes sure of correct pronunciation.

If time permits, the children form a train, single file, and run round room saying "Puf-f-f! Puf-f-f!"

Number

Further work on Number 6.

$$\begin{array}{ll} 3 + 3 = 6. & 2 + 2 + 2 = 6. \\ 3 \times 2 = 6. & 2 \times 3 = 6. \end{array}$$

Children are provided with six sticks each. "Here is a snowdrop. See the dainty white cup leaves. How many are there?" Lay 3 sticks on desk and write figure 3 on boards. Children arrange them arrowhead shape in imitation of snowdrop sepals. "Here is another snowdrop. How many cup leaves has it?" Lay 3 more on desk and write the figure 3 beneath the first 3. "How many sepals have 2 snowdrops together?" A child tells the "addition story" that 3 leaves and 3 leaves are 6 leaves. Children complete the sum on their boards and print $3 + 3 = 6$. Another child tells the "multiplication (or times) story":—Two threes are six, or two times 3 are 6, or twice 3 are 6. Children

work sum on boards $\overset{3}{3}$, and write $3 \times 2 = 6$.
6

"Here is another snowdrop. How many

altogether? I lay one of them on the desk. How many green sword leaves are there on its stem?" Children lay 2 sticks in imitation of leaves (like letter v). "Print the figure 2 on boards. I lay another snowdrop down. How many sword leaves?" Children lay 2 more sticks and print 2 under the first 2. "This is the third snowdrop. How many green leaves?" Children lay another 2 sticks on desk and print 2 under the other figures on boards. They then add the sum. "Joe, write the 'addition story' on the board." Joe writes $2 + 2 + 2 = 6$. "How many times did we need to place 2 leaves on the desk? And what are 3 times 2?" Children print $2 \times 3 = 6$ on boards.

Teacher gives further exercises on $3 \times 2 = 6$ by means of such examples as the following:—2 tricycles, how many wheels? 2 triangles, how many corners?

Further exercises on $2 \times 3 = 6$:—3 bicycles, how many wheels? 3 pairs of socks, how many socks? 3 twins, how many children?

Story—THE COMING OF SPRING

An old man lay asleep on the ground. His hair was long and white, and was covered with snowflakes. His beard reached to his knees, and was frozen into long strands. He was King Winter, and, to show his rank, he wore a crown which glittered and shone in the cold sunlight. It was a crown of dozens of bright frozen raindrops. His sparkling robe was made by Jack Frost. His hands were cold—so cold, that whatever he touched shivered and shook. Even his breath was so icy that all the flowers died when he breathed upon them.

When this king began to reign he was young and strong. He called his two knights to him and bade them show the earth how mighty he was. The first knight, Sir Cold Wind, journeyed through the land and blew upon the people till they shuddered and said, "Ugh! King Winter has begun his reign; here comes his knight, Sir Cold Wind." The second, Sir John Frost, touched the earth with his fingers and froze it hard. He wove his beautiful designs in the hedges and shrubs and covered the ponds with ice. The boys cried, "Hurrah!

Here comes Old Jack Frost." They did not say "Sir John Frost", although that was his real name, because they knew him well and loved him. He often played games with them, painting their noses and pinching their toes, or nipping their fingers.

But at last King Winter had grown old and weary. He was so very tired, that he longed for rest; so he commanded his knights to cease from their labours and return with him to his home in the far-off frozen north. Even whilst he was speaking he began to doze, and at last he lay asleep on the ground.

He had not been asleep long before he felt someone touch him, and, looking up to see who had wakened him, he found the most beautiful maiden in the world. She wore a crown of golden crocuses, for she was a royal princess. Her robe was of green moss velvet, and her flowing hair was the colour of dancing daffodils. Her eyes were like violets, and her cheeks were as pink as the tips of daisies kissed by the sun. Her arms were full of hyacinths, tulips, and lilies.

"Why did you waken me?" King Winter asked. "Because I am the Princess Spring Time. It is now time for you to leave this land and let me rule in your place." Old King Winter laughed scornfully. "You! Why, where are your knights?" "Here is my first maiden, The Lady Warm West Wind. Her voice is so sweet that when she sings the birds all return. This is my second maiden, The Lady Gentle Rain. She is often sad, and weeps for the poor little

flowers which are locked in the earth by your knight Sir John Frost. Her tears are magic, for wherever they fall the earth becomes soft, and the flowers begin to grow." "I would leave my throne to you, but I fear you are too weak to rule without strong knights," said old King Winter wearily. Just then Lady Warm West Wind began to sing and Lady Gentle Rain began to weep. The strangest thing now happened. When the old King heard the Lady Warm West Wind's soft voice, he started up in fear. Wherever her sweet breath touched his robe the beautiful pattern was disappearing. "Ho, ho! Sir John Frost," he called, "come to my aid;" but Sir John Frost dare not come near—he knew that danger lay in the tears of the Lady Gentle Rain. "Ho, ho! Sir Cold Wind," he cried, "help me;" but Sir Cold Wind only moaned and stayed at a distance. "Then if my knights have forsaken me, I suppose I must leave my throne to you, fair Princess Spring," said old King Winter. Slowly, slowly he moved away and called "Good-bye" in a feeble voice, for he had grown very weak. As he walked, tiny raindrops fell from his crown and from his wonderful robe upon the earth. Wherever a drop sank into the ground, a tiny green shoot sprang up to meet it. The Lady Warm West Wind sang her sweetest songs, and the Lady Gentle Rain fed the wee plants until they grew into dainty white snowdrops. And that is the true story of how the snowdrops were born.

Song—"DEAR LITTLE SNOWDROP"

—J. P. Cowling in *Delightful Ditties* (Brown).

Game—THE SNOWDROPS

1. Qui - et - ly, qui - et - ly peep dear snow - drops white,
 Care - ful - ly, care - ful - ly, or you'll get a fright;
 Old Jack Frost is wait - ing near, Cold wind blow - ing,
Sweetly
 They will kill you, this fear, Dain - ty snow - drops white.

2. "Blowing cold, blowing cold, with my breath so rough."
 "Freezing hard, freezing hard, till they've had enough."
 Snowdrops shiver hard and sigh:
 "Oh how cold! We die, we die!
 Pretty world, goodbye, goodbye!"
 Dainty snowdrops white.
3. Oh, Jack Frost! oh, Jack Frost! See the great warm sun
 Frightens him, frightens him, makes him quickly run.
 Hold your head up, Crocus blue,
 Ring your white bell, Snowdrop too;
 Mister Sun is kind to you,
 Dainty snowdrops white.

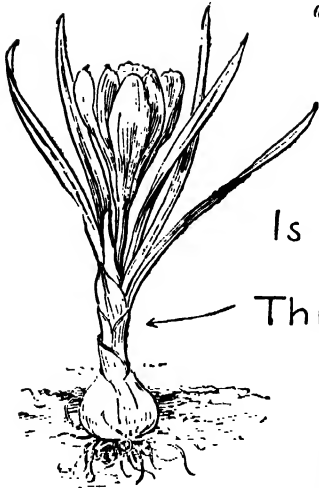
Directions.—Some children represent snowdrops, while the rest stand round to form a garden. Three larger boys are chosen; one for the wind, another for "Jack Frost", and the third for the "great warm sun".

Verse 1.—The "garden" children bend forward as if to warn the snowdrops against the frost and cold. The snowdrops, who are crouching on the floor, raise their hands, which are held palms together to make the sheath. Each action is done slowly and cautiously.

Verse 2.—The "cold wind" boy sings in a boisterous voice, "Blowing cold," &c. Jack Frost hisses, "Freezing hard, till they've had enough". The snowdrops shudder and begin to sink down until

Verse 3.—The great warm sun (a boy standing on a chair with arms held round for the sun) shines. Jack Frost springs away, the cold wind moans and leaves the room, and the garden children sing brightly. The snowdrops raise themselves with heads between arms for a time. Soon their heads leave the sheath, and they nod and shake merrily. This game is very effective if little girls with white pinafores take the part of snowdrops.

Blackboard Reading and Drawing



"Good day! I am Crocus.
My six purple leaves, where they
all join, look like a pipe.

This pipe is my stalk.
Is it not a very short one?

This coat is
Take my
see my
Here

called a sheath.
sheath away and
seed-box.
it is open.

Do you see
Mr. Bee likes



the
my

bright leaves.

He must walk a long
honey.



To pay me for the sweetness
he takes away, he leaves me pollen on
this gold fringe.

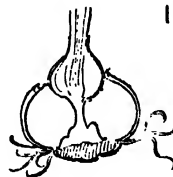
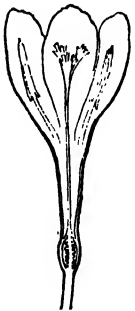
This pollen makes my seeds grow.

Do you see the road from the
fringe to the seed-box?

It is like a fairy's walking stick.

This is the inside of
my winter's home.

Can you find me



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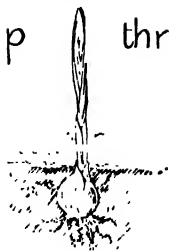
"I am Snowdrop. I come to tell you of Spring.

The children love me. I am brave.

I push my green shoot up through the hard ground.



When I am young, I wear a coat; but I soon grow out of it.



I hang my head from my powder



to keep the rain boxes.

Do you see my seed-box? Here it is open so that you may see the seeds waiting to grow.



All the winter I slept inside this bulb; but now I am grown up.



I wear a green crown; Mr. Bee walks down it to get at my honey-box. It is near my seed-



Springtime.



Wake! darling Snowdrop, white
as a Lily,

Sweet Crocus
'tis time
to arise;



And show your gold trumpet,
Daffydowndilly,
For blue once again are the
skies.



What is the story brave Robin
is telling,
With a voice that is wild with
glee?

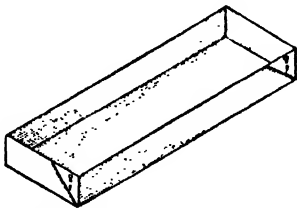
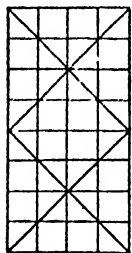
His tiny wee throat with joy is
swelling,

"Oh! Springtime's the time for me!

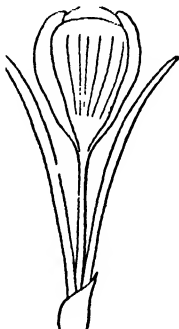
M. B.

Paper Cutting—CROCUSES

One set of children can cut out the flowers from yellow, white, or purple paper, another the grass, and a third the leaves. The best cuttings mounted tastefully on dark paper form a dainty frieze for classroom.

Paper Modelling—WINDOWBOX FOR CROCUSES

Oblong sheets of paper are required, divided as above.

Free-arm Drawing—CONVENTIONAL CROCUS

Drawing to be done with both hands.

Clay Modelling—CROCUS CORMS FROM NATURE**Brush Work—SNOWDROPS**

Snowdrop flower, white; leaves, green mixed with Chinese white. If these are painted on tinted paper the effect is good.

Chalk Drawing—SNOWDROP PLANT FROM NATURE

Bulb, reddish brown; roots, white; leaves, pale green; and petals, white; corolla, white streaked with green.

SPRING PERIOD

Object Lesson—OPENING LEAVES

PREPARATION.—In autumn the teacher should get twigs from several well-known trees, such as horse-chestnut, beech, oak, mountain ash, lime, and willow trees. These should be put in water, and kept on the window ledge all through the winter until the following spring, when the above lesson is to be taken. Choose medicine bottles for the purpose, and tie tiny labels on the neck, with name of tree from which the twig was taken.

The children note the progress of the roots which grow out of the twig, and teacher makes drawings of the different stages in the development of the buds. If properly attended to, the buds in school will open long before those outside.

For the purpose of this lesson choose the horse-chestnut bud, because of its size and marked characteristics. For some weeks before the lesson the children should be encouraged to bring twigs of any tree to school, but teacher must see that for this lesson each child has a small twig of horse-chestnut. If the interest in these winter buds has been kept keen, there will be no need for further preparation of the children's minds for this lesson.

PRESENTATION.—Let the children freely examine their specimens, and tell them they will find a reason for everything they see.

(a) **When the Buds Grow.**—The children will remember that last autumn, when the leaves were falling, they noticed a tiny bud growing in the axil of the old leaf and the twig. This was as if the bud had chosen the most sheltered place it could. Now they see the same bud that was there last autumn growing just above the scar left when the leaf dried and fell to the ground. Let children describe the scar in this case—a mark like a horseshoe with nails in it. These

nail marks are the places where bundles of sap tubes passed through the twig to the stem of the leaf to feed it. Teachers can show other twigs with scars which vary in shape according to the kind of tree.

(b) **Why they did not Develop fully then.**—The leaves were quite ready to grow; all parts were there, and there was nothing wanting but warm weather to coax them out. Here the teacher should cut the buds in two, and show the class an enlarged drawing of the section of the large horse-chestnut bud with its wrappings and miniature flower. The middle and largest bud is the one containing the beautiful flower; the two side buds have only baby leaves in them.

The cold weather of coming winter arrested their growth, and they waited until the warm air of spring should awaken them.

(c) **How they are Kept during the Winter.**—*Safe from Damp and Rain.*—The outside coats are thick and brown. They make themselves waterproof, and are protected also by the sticky materials especially noticeable on the tips of the buds. Compare children's rain cloaks. Let children touch the gummy secretion and remark on its stickiness.

Safe from the Cold.—The warm, soft, white down inside acts as a bed for the baby leaves which are carefully folded away from the frost and snow. Compare blankets in baby's cot at home. The tender green baby leaves need great care until they are able to protect themselves. Let children feel how soft this down is.

(d) **How the Leaves are Packed in the Bud.**—The leaves of the horse-chestnut are folded like a sheet of notepaper, with the two halves closed together. This may be seen clearly from a fairly advanced specimen. Show a twig which has been

kept in a classroom all the winter, and let children see for themselves the deep ridge made by the fold in each leaflet. This packing away varies according to the kind of tree. Show a beech bud with its leaves pleated in and out like a fan, and a young pear leaf unrolling from the middle rib.

(e) **How the Leaves Open Out.**—Show twigs in different stages of development. The outside coats get loose and drop off first. The inner green coats fall off later. Compare casting of winter clothes when the warm weather comes again. The baby leaves have now no further use for their winter wraps. The downy stuff has done its work, and this, after sticking to the leaves and stem, shrivels and dries. The green leaves open out in a sort of circle, and grow larger and broader. It will be noticed that they hang down when still tender and young; the reason is given below.

(f) **Appearance when Opened Out.**—Show a picture of horse-chestnut tree, or take children to see a real one. They will note its size and noble proportions. The leaves are in keeping with the tree, and open out a broad flat surface of five or seven leaflets to the light and air. When

evening comes, they begin to droop until they are hanging in an almost vertical plane. This is to prevent loss of heat. It has been proved that leaves exposed horizontally all night collect much more dew and hoar frost than those hanging vertically. This is the reason why the young leaves hang downwards until they are strong and tough. They need to retain what warmth they receive in the warm hours, because they are more tender and affected by cold than mature leaves.

ASSOCIATION.—Associate with opening flowers, growing bulb plants, and waking nature generally.

FORMULATION.—

“Green leaves and blossoms and sunny warm weather,
And singing and loving all come back together.”
—S. T. Coleridge.

APPLICATION.—Let children make drawings from the natural specimens. The twigs they have used in the lesson can be put in a jar and examined every few days. The children tell in their own words what they see, and the reason for it. The kindergarten occupations and free expression lessons offer scope for applying knowledge gained in this nature lesson.

Phonetics

PART I.—*Breathing Exercise.* **PART II.**—*Sounds “c” and “ç”*

(i) **1st Movement.**—Hands raised to shoulder height, palms facing downwards, arms extended sideways. Breath inhaled.

2nd Movement.—Palms up, hands meet high above head, heels raise. Breath held in.

3rd Movement.—Hands brought back in semicircle to shoulder height, palms up, heels sink. Breath still retained.

4th Movement.—Palms downwards, hands dropped slowly to sides, arms at full stretch. Breath exhaled.

Teacher insists on “hearing the breath

come out”. *N.B.*—This is advisable at this stage, because audible expulsion of breath necessitates extra in-drawing of air.

(ii) “See these twigs. The baby leaves are beginning to waken. How have they been kept alive and warm all winter? Yes, a brown coat. Ned, bring yours from the cloakroom. What is the first sound in ‘coat’? How do you make it? Put a finger in your mouth and feel the top as far back as you can. How does it feel?”—“Soft.” “Feel just behind the biting teeth

at the top. Yes; that feels hard. Think whether 'c' is made in the soft or the hard part. What happens to the tongue?" It shortens and thickens till the part near the throat meets the soft part of the roof of the mouth. Teacher compares top of mouth with roof of house, hence name, "roof of mouth". Record:—Drawing of a "coat" with coat printed.

"Here is a tiny leaf peeping through a

gap in its overcoat? What is a gap?" Teacher shows picture of a hedge or wall with hole in it; "gap" in corner. "What comes out first when you say 'gap'? How did you make the sound?" Children tell "just as 'c' was made". "Yes; but there is something besides. Feel your throats. Now tell the difference between 'c' and 'g'." Children practise the sounds "c" and "g" as teacher points.

Number

Number 6 continued.

$6 - 3 - 3$	$= 0.$
$6 \div 3$	$= 2.$
$6 - 2 - 2 - 2$	$= 0.$
$6 \div 2$	$= 3.$
$6d. \div 2$	$= 3$ pennies or 1 three-penny piece.
6 halfpence	$= 3$ pence.

APPARATUS.—A bundle of sticks for each child. Twigs for teacher. Cardboard coins representing farthings, halfpence, pence, 3d. pieces, 6d. pieces.

"These are beech twigs. Count them. All put 6 sticks in a bundle like mine." Teacher holds up 6 beech twigs. "Well, divide my twigs into 3's. That is, put them into bundles, 3 twigs in each bundle." After child has done so, the children divide their sticks in the same way. Teacher writes $6 \div 3 = 2$ on board, and children tell what the figures mean.

"Now divide your twigs into bundles of

2. Flo, come and divide mine—the glasses I have will only hold 2 twigs each. How many bundles of 2? How many times could I take 2 twigs away from the 6 twigs on my desk?" Teacher writes $6 \div 2 = 3$, and asks class what it means.

"See these 6 pennies in my purse. What do we call 6 pennies?"—"Sixpence." "All put 6 counters on desks, and find out how many times I can take 3d. from 6d. . . . Now put the 6 counters back again. Find how many times I can take 2 pennies from 6d. . . . Counters back again. How many times can you take 1d. from 6d.?" Teacher gives exercises for working on boards, e.g. $6 \div 2$; $6 \div 1$.

Money values for 6d. are taught through "shop-keeping". That is, a child stands behind teacher's table and gives change (cardboard money) to different children who produce a 6d. piece. If children live in a district where farthings are used, they can learn 6 farthings $= 1\frac{1}{2}d.$

Story—THE SLEEPING BEAUTY

(Retold from Grimm's *Briar Rose*)

Long, long ago lived a king and queen who for a long time had no children, and so were very lonely. At last, one day a baby girl was born. You can imagine how

very great was the joy of the happy father and mother. They invited all their friends and relations to a feast in order to celebrate the birth of their only child. In this country

were thirteen wise women whom the King and Queen wished to invite, but as they had only twelve gold plates, one woman had to be left out.

On the feast day each woman gave the baby girl a splendid gift. "She shall grow more lovely than a flower," said one. "I will give her gold and silver without end," said another. "My gift of goodness is the best," said the third. And so they all blessed the child, until only the twelfth remained to give her blessing. Just then the door opened, and the wise woman who had been left out entered the dining-hall in great anger. "My gift is death," she said. "When the child is fifteen years old she shall prick her finger on a spindle and die!" With these words she left the hall. How unhappy the King and Queen were then. But the twelfth wise woman said, "No; she shall sleep for a hundred years, but not the sleep of death."

When the King heard this, he ordered all the spindles in the kingdom to be destroyed, so that the angry woman's words should not be fulfilled.

The years passed by, and Briar Rose, for that was her name, grew, as the first woman had said, more lovely than a flower, and everyone loved her. One day, when the King and Queen were away, she wandered round the castle until she came to a tower she had never seen before. Here she found an old lady spinning flax. Like most other little girls, Briar Rose was very curious, and took hold of the flying spindle. It pricked her finger and, even as she held it, she sank back on the bed asleep. A strange stillness came over the castle. Every living thing began to feel drowsy and fell asleep. The King and the Queen, who had returned home, leaned back in their thrones and went to sleep. The noble knights and ladies tried to keep their heavy eyes open, but in vain. The servants went to sleep at their work;

the horses fell asleep in their stables; and the pigeons in the courtyard tucked their tiny heads under their wings and, though it was daylight still, slept soundly.

"Not a word!

No one stirred!

Deep in the hearth the fire slept too!"

The wind which rocked the leaves fell asleep also, and not a leaf on the trees in the castle grounds moved. There sprang up round the castle a hedge of thorns so high and thick that no one could pass through it.

Everybody heard of the Sleeping Beauty, as Briar Rose was called, and young men, kings' sons, tried to enter the castle to waken her; but they were all caught in the thorn bush and died. And so the beautiful princess slept on and on; days, months, and years passed away, and still all was silent and sleeping. At last, when nearly a hundred years had gone by, a young prince who had heard of the deep sleep which lay over the castle determined to waken the beautiful Briar Rose. He was not afraid of the thorny hedge where so many had perished miserably. His heart was brave and strong, and, as he put on his armour, he felt no fear at all. With sword in hand he set out for the castle. When he reached the thorny hedge he found nothing but tall beautiful flowers, which swayed and made way for him to pass. He walked quickly on through the castle grounds, and no one stood in his way, for, strange to say, it was just one hundred years that day since the princess fell asleep. On and on he went, past the sleeping creatures in the courtyards, until he came to the tower where Briar Rose lay softly sleeping. Then at last—

"This goodly knight,

Swinging his sword so sharp and bright,

Came to the maiden's side.

Handsome he,

As could be;

Gently he kissed his sleeping bride.

"Straightway arose the maiden fair,
And when she saw him standing there,
Kissed him as lovers do;
Morning broke!
All awoke!
Deep in the hearth the fire woke too."

Then what could happen but that the
prince and princess were married, and lived
happily ever after!


—Extracts from *A Song Garden for Children*,
with kind permission from Mr. Edw. Arnold,
the publisher.

N.B.—This story can be made into a
delightful allegory, in which the Earth sleeps
through the long, dark, winter months, and
is awakened at the appointed time by the
first kiss of spring.

Song—THE SAP HAS BEGUN TO FLOW

—Songs for Little Children (Curwen).

Game—THE SLEEPY MOTHER-TREE



1. Ee eel Ee eel We laugh with glee. Just look this sleep - y
Ah, ah! ah, ah! wit! laugh-ter we shake; Oh, we make her



tree! She's not like you and me. Ee eel Ee - eel We
wake? We laugh till our brown sides ache. Ah, ah! ah, ah! with



laugh with glee. Just look at this sleep - y tree.
laugh-ter we shake; Oh, how shall we make her wake?

3. Oh, oh! oh, oh! we know, we know.
We'll get the warm wind to blow,
And breathe on her gently—so!
Oh, oh! oh, oh! we know, we know.
We'll get the warm wind to blow.

4. Heigh ho! heigh ho! at last, at last
Her long winter's sleep is past—
Her green leaves are growing fast.
Heigh ho! heigh ho! at last, at last
Her long winter's sleep is past.

Directions.—Children stand as trees in a forest. One child in the centre is the sleepy tree. She stands with bent head, eyes shut, and body apparently lifeless.

At the words "She's not like you and me" the children smilingly nod at each other. In verse 2 the "trees" sway about as if with laughter. This action must be done gracefully, so as to truly imitate nature. In verse 3 the trees look as if they had an idea, and at the words "And breathe on her gently—so!" they suit the action to the words, and, bending forward, blow softly on the sleeping tree. At last the tree awakens, and, looking around, sees the other trees laughing. Slowly she stands erect, arms stretching out and fingers (leaves) beginning to grow.

Blackboard Reading and Drawing



This is a Horse-chestnut leafbud.

Do you see the marks, where last year's leaf fell off? They are like horse shoes. That is why the tree is called Horse-chestnut.



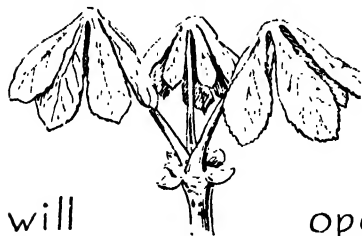
What is the gum on the tip of the bud for? Cut the large top bud through, and see the flower waiting to grow. Inside the brown scale coats, there are some sticky green wraps.



The bud throws off its wraps, when the days grow warm. It says, "I do not need you now."



See how the leaves are folded.

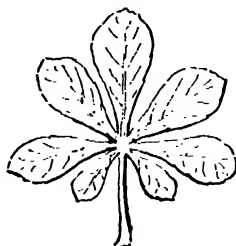


Now they have opened out!

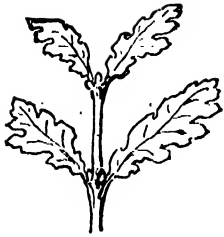
Why do they hang down?

When they are strong they will open out like a table. How many tiny leaves make one Horse-chestnut leaf?

Here is a full-grown leaf. When the day grows dark and cold, the leaf hangs down to keep warm..



The Story of a Leaf.



1. First, a tiny bud appears
In the Autumn weather,
Then the leaf which stands below
Floats off like a feather.
2. All the winter time, the bud Snug and warm is keeping,
For a thick, brown overcoat Wraps him round while sleeping.
3. By and by the trees are roused By the fairy voices,
"Wake," they sing; "The Spring has come
All the world rejoices."
4. Then the bud begins his work, Growing night and daytime,
Till a tiny leaf unfolds, Longing for a playtime.
5. All the Summer time the leaves
Dance and play together,
Giving shelter to the birds
From the rainy weather.
6. But at last the Autumn comes,
Bringing nights so dreary;
And the wind calls to the leaves;
"Little leaves so weary
7. I will take you in my arms -
Cruel to you never -
And will bear you to the ground,
There to rest for ever."

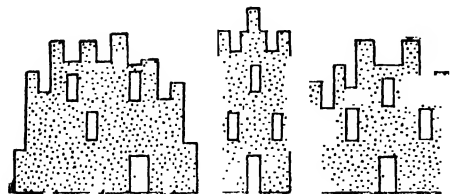


from The Practical Teacher - by permission

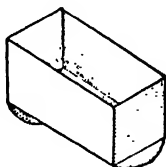
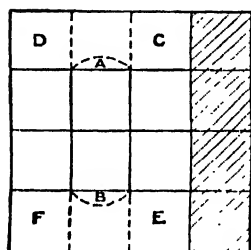
Sissie T. Butler

Another poem suitable for recitation:—"Little by Little"—M. Riach's *Recitations for Infant Schools* (Blackie).

Paper Cutting—SLEEPING BEAUTY'S CASTLE



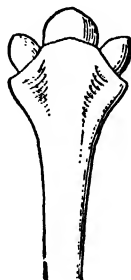
Paper Folding—CRADLE



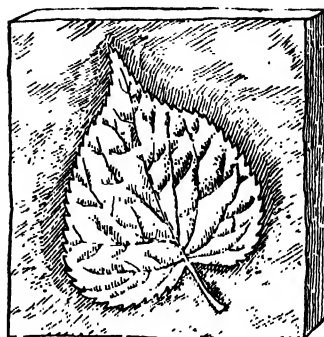
Liken baby's cradle at home with cradle where mother tree rocks her leaf babies.

Cut away the shaded portion and cut along dotted lines. Fold back A and B to form rockers. Fold C over D, and E over F, for head and foot of cradle. Pin.

Free-arm Drawing—ASH BUD



Clay Modelling—ANY LEAF WHICH CAN BE OBTAINED

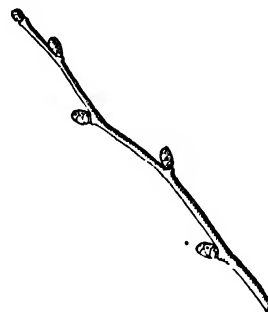


Brush Work—HORSE-CHESTNUT BUDS

To be done from actual specimen. Twig, a light brown; bud, brown madder; tips of bud, black—to be done when other colours are dry.



Chalk Drawing—ANY TWIG WHICH CAN BE OBTAINED



Children should be allowed free use of coloured chalks. Any marks of original observation should receive commendation.

Object Lesson—BIRDS AND THEIR NESTS

PREPARATION.—The lessons on awakening plants and animals, which have gone before, will have paved the way for this lesson. Get the children to talk of the warm spring weather, and how it makes the tiny leaf-buds open and the sleeping things awake. The same cold weather which frightened the leaf-buds into sleep last autumn made the birds seek warmer countries. The soft air has returned, and with it come the busy birds in joyous companies.

PRESENTATION. — (a) **Why Nests are Built.**—They are built for cradles for the baby birds. Do the father and mother bird sleep in them? Compare the “leaf cradles” in the tree.

(b) **Where they are Built.**—Children can see the rooks’ nests easily in the top of the high trees, but other birds, such as the lark and sparrow, which do not build so high, need to hide their nests. The hedge-sparrow’s nest is safely hidden in the hawthorn bush. The lark builds among the grass in a field. The swallow makes her nest in a barn. The house martin plasters a nest of mud against the wall under the eaves. The thrush builds in a tall fir tree. The woodpecker finds a hole in a tree and lines it with sticks.

(c) **Their Shape.**—This varies with kind of bird. The martin’s nest is like a ball with a tiny hole in the top. The thrush’s nest is large and hard inside like a cocoanut shell. Some birds are so clever that they can use any stick or piece of rubbish which they find. Some birds will use the nests made by other birds. Tell of the cuckoo, which builds no nest of its own but the mother bird lays her eggs one by one in other birds’ nests. When the young cuckoo is hatched it turns its young companions out of the nest when their

father and mother are away seeking food. The teacher must show different nests, and let children compare their shape, size, and material with which they were built.

(d) **Their Eggs.**—These vary in number according to the kind of bird. The female sparrow lays five eggs, and so does the lark. They are coloured according to their kind also. The martin’s eggs are white, with no spots; the thrush’s eggs are blue, spotted with black; the swallow’s are white, with red markings; and the robin’s also are white, with red. Show different eggs, and let children learn to distinguish them.

The arrangement should be noticed. The mother bird lays her eggs with the points in the middle. Why?—The young bird comes out at the broad end, and besides that, there is more room in the nest when the eggs are so arranged.

(e) **The Mother Bird’s Care.**—When all the eggs are laid, the mother bird curls up her legs and sits on the eggs to keep them warm. In about two weeks a tap! tap! is heard; the baby bird is knocking at the broad end of the egg to get out. The mother bird helps it with her bill, and out comes the young one. Most birds, such as the sparrow, blackbird, and swallow, are very helpless; they have no real feathers to keep them warm, and some tiny birds are even blind. Young ducks, partridges, &c., are covered with down, and as soon as they leave the shell run about seeking food for themselves.

When the wings begin to grow the little bird must learn how to fly. The mother bird will show her children how to flap their wings, and in this way raise themselves a little. After a time, when they venture to leave the nest, she spreads out her wings to

catch the weak ones which would otherwise fall to the ground. They must learn soon, for when the autumn comes the long migratory flight will tax them all very much.

Like the baby at home, the baby bird does not know how to eat; and even if it did it is not able to find its own food. The mother blackbird is careful not to give her birdlings too much to eat at once, and will tear long worms into tiny pieces. Each little bird is fed in turn, and all get a fair share.

Not only does the mother bird keep her young ones warm, feed them, and teach them to fly, but she keeps the nest clean and in good repair. If there is a hole in the side which the wind or storm has made, the parents start to repair the damage at once. Compare father and mother at home.

(f) **Where Birds Sleep.**—Outside. Why do they not get cold?—They fluff out their feathers to allow the air to get under. After a time this air is warmed by their bodies, and, not being able to escape, keeps the birds from being chilled by the night damps and cold. Some birds will cuddle in an old nest close together; some will make holes in

a haystack and sleep there; others find holes in trees; while some, such as the swallow, sleep inside barns. How do the birds sleep?—They settle on the branch or twig, and clasp it tightly with their claws. Bending their legs, they thus tighten the muscle which is holding on to the branch. The sleepier the birds are the more they press on to the branch, and the more tightly the claws clasp the support.

ASSOCIATION.—Compare the kindness and untiring watchfulness of the mother bird with that of the children's own mother. Teach the meaning of "Honour thy father and thy mother".

FORMULATION.—"Lo the winter is past, the rain is over and gone; the flowers appear on the earth; the time of the singing of the birds is come."—*Song of Solomon*.

APPLICATION.—Children can make a bird chart for the year, on which the names of the birds are put as they appear in the district. Reading and poems, kindergarten occupations, and songs and games can all be related under this head.

Phonetics

PART I.—*Breathing Exercise.* PART II.—*Sounds* and

(i) **1st Movement.**—Hands raised slowly in front above head, thumbs meet. Inhale. **2nd Movement.**—Forward bend till fingers touch the ground, knees rigid. Exhale. **3rd Movement.**—Attention! Teacher counts 3 or 4 to each movement to ensure slow and careful exercise.

(ii) Teacher shows a bird's nest, tells class to say the word, and asks for first sound in "nest". "How is 'n' made? Tip of tongue touches the hard palate" (*N.B.*—This word is not used to children), "lips are held open. But this is not all. Fingers on throat. Yes,

the sound is started in the throat. Something else is needed. Say 'n' again, but hold nose tightly between finger and thumb. Does that sound right? Then you see that 'n' requires lips, tongue, roof of mouth, throat, and nose." Children repeat the sound, print it on their boards, and build other words containing it.

"You have just seen Mr. Sparrow's nest. Here is a picture of Mr. Sparrow and his mate. Yes, Mrs. Sparrow is his mate. You have playmates. Who is your playmate, Tom Smith?" Teacher points to "mate",

printed in the corner, and tells children to say "m". "How is the sound 'm' made?" Children compare it with "n". In "n" the lips are open; in saying "m", shut. "n" needs the tongue to touch behind the upper teeth; "m" does not.

Teacher shows class what an important

part the nose plays in speech, especially in such sounds as "n" and "m". She holds her nose and says "Nancy", which sounds like "Dancy"; "Martin", which seems to be "Bartin", &c. She impresses upon the children the absolute necessity for frequent use of the handkerchief.

Number

No. 6 continued.

$$3 \text{ ft.} = 1 \text{ yd.}$$

$$6 \text{ ft.} = 2 \text{ yd.}$$

Teacher shows inconveniences which would arise if there were no standard of measurement. "Who has stood against the wall to be measured? How can father tell his friends at work how tall you are? Will the friends need to come and see the mark on the wall? When Ned Smith's mother buys cloth for his suit, does she need to take the paper pattern to the shop and lay it on the cloth?" Teacher mentions other things, e.g. carpet for floor, curtains for window, &c. "How are these bought? How would the builder or joiner work without the means of expressing measurements accurately?"

Children pretend to buy linen for cricket shirts, and hair ribbon from the draper. In this way teacher draws from the children

that the yard and foot are the measures in most common use.

Teacher shows a draper's yard-stick, or a substitute for it. She tells children that all yard measures must be equal in length to a yard measure kept in London purposely for a copy (standard). Children take measures for themselves of room wall or anything which the teacher has previously ascertained to be an exact number of yards.

The children then measure other things which are not an exact number of yards, and teacher deduces from this the need of a *smaller* measure. The foot-rule is shown, and children measure the stick with it. The stick is seen to contain the foot-rule an exact number of times. How many times? Therefore 1 yd. = 3 ft. Children answer such questions as—6 ft., how many yd.? 2 yd., how many ft.? $\frac{1}{2}$ yd., how many ft.? Cost of 2 yd. ribbon at 1d. per ft. Cost of 1 ft. at 6d. per yd.

Story · THE BIRDS OF KILLINGWORTH

— From Longfellow.

King Winter had gone away, and the great warm sun had frightened Jack Frost back to his cold northern home. When he went, the streams whose feet had been ice-bound began to flow. The trees no longer shivered with cold. "Ah, now," they said,

"the warm soft Spring will clothe us in our new green dresses." This was true, for before very long the baby buds burst their winter coats and shook out their pretty leaf fans.

The birds came flying from far back to

their old nests in Killingworth. What a mending and making of tiny homes there was! and how happily they sang and worked, and worked and sang!

But the farmers shook their heads and spoke crossly to each other. "What shall we do with these creatures who eat up our grain and rack our ears with their noisy singing?" Even as they spoke the birds came flying around, and began to pick up the seeds the farmers had just sown. Such happy birds they were, they had no fear of the scarecrows, and as for the clappers, *they* only made a noise, and could not hurt them at all.

So they picked up their dinner round the scarecrow's feet, and even perched on his hat whilst they ate away greedily. They laughed at the clapper, and drowned its noise with their happy songs.

This made the farmers more vexed than ever, and they said, "We shall soon have no seeds left, and where will our harvest be then?" They decided to clear the birds from Killingworth away for ever. Every little singer was to be shot.

What a sorrowful spring that was for the birds of Killingworth! One by one they were killed, until there was not one left to sing a song of grief for his dead friends.

"Now," said the farmers, "we shall have a grand harvest this year," and they rubbed their hands with joy. They were very mistaken, for the grubs were now no longer afraid of being eaten by birds, and the worms could crawl wherever they wished. They ate the leaves on the trees, and spoiled all the lovely flowers. There were so many, that they fell off the leaf-eaten trees on the little boys and girls who played there.

That summer there was no glad singing in Killingworth, but sorrow and tears, for the tiny children asked sadly for the sweet birds. They looked with tears at the empty nests in the tree tops, and listened in vain for one little song. They could not play in the fields for the number of insects and creeping things. The farmers saw their mistake. "We did not know that the birds worked so hard for us, and, after all, a little grain was only poor wages for such good service. We have killed our best friends," they said mournfully; and so they had, for the harvest was poor that year in Killingworth, and the children wept for the feathered singers.

Next spring—so severe had been the lesson—"large wicker cages, all full of singing birds", were brought to Killingworth, and once again that town was filled with music and happiness.

Other stories are:—1. "The Willow Wren"—Grimm. 2. "The Nightingale"—Hans Andersen. 3. "The Lark and the Daisy"—*Favourite Fairy Tales* (Blackie's School and Home Library). 4. "How Birds Learned to Build their Nests"—*Blackie's Model Readers*, Book III.

Songs—I. "OF SPECKLED EGGS THE BIRDIE SINGS"

—*Songs for my Children* (Leonard & Co.).

2. "GUTE NACHT"

—Franz Abt.

Game - HAPPY BIRDS

1. The wood is full of so tall, They

Brightly

grow, you know, they

the wind blows,

then they all Bend so, you know, bend

2. The mother birdie stays all day;
She sings, you know, she sings;
And, look! the father 's far away;
The food, you know, he brings.
3. The baby birds, so small and wee,
To fly, you know, to fly,
They have to work like you and me,
And try, you know, and try.
4. And when the sun goes down at last,
"Cheep, cheep!" they sing, "Cheep, cheep!"
Until the long dark night is past,
They sleep, you know, they sleep.

Directions. -- *Verse 1.* Children stand in a ring, which represents the wood. The taller children are the trees, and when the wind blows they bend their bodies and sway their outstretched arms gracefully. Five or six boys can be the wind and whistle softly.

Verse 2. Several smaller rings, for nests, are formed by the trees, and in each of them are the mother bird and her wee ones. The father bird from each nest is hunting for food, which he brings home and gives to the waiting birds.

Verse 3. The mother bird teaches the little ones to fly. The learners imitate the frightened fluttering and twittering. This verse is greatly enjoyed by the little ones, who, when falling, are caught by the mother.

Verse 4. All the birds fly home and settle near their nests—the baby ones in the nests. They all go to sleep whilst the children sing very drowsily. The last line must die away almost to a whisper.

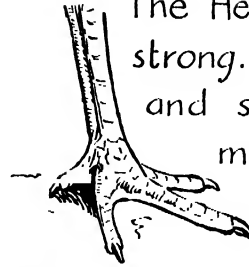
N.B.--These are a few hints, but the teacher with originality will easily select other actions.

Blackboard Reading and Drawing

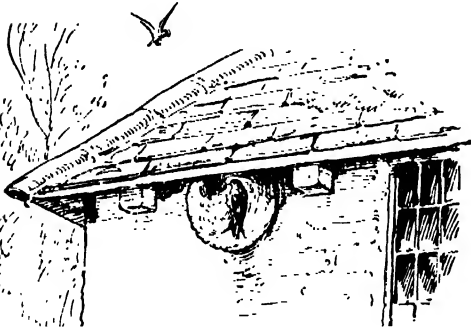
The Skylark's foot is thin and light so that the lark can fly high in the sky.



The Hen's foot is strong. It walks and scratches much.



I am a Swallow.
See my wide mouth.
can catch my
dinner as I fly.



Here, under the eaves is the House Martin's nest.

I am a Bullfinch. I like seeds and grain. I do not need a wide mouth.



The Skylark's nest is in the grass.



I live in the nest among the reeds. They call me the Reed-Warbler. Hear me sing,
"Tr-r-r-r."

Spring Signs.

The Wind blows
East,
The Wind blows
West;



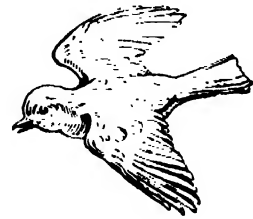
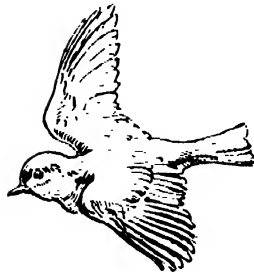
The blue eggs in the
Robins' nest,



Will soon
have wings,



And flutter
and fly away.



— Longfellow.

Paper Cutting—RETURN OF THE BIRDS

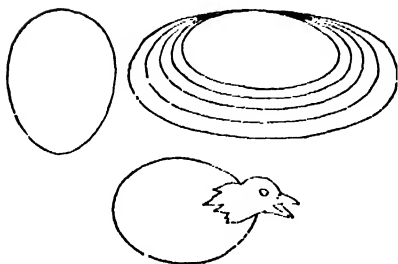


Directions.—One section of the class can cut out the trees, another the grass, and another the flying birds. These can be pasted on a sheet of paper to form a landscape as above. A frieze of this kind is very effective for decoration of the classroom.

Paper Folding—FLYING BIRD

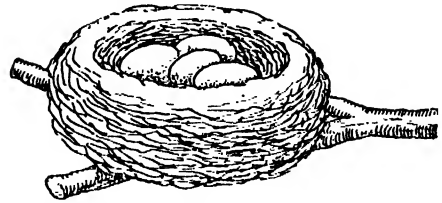


Free-arm Drawing



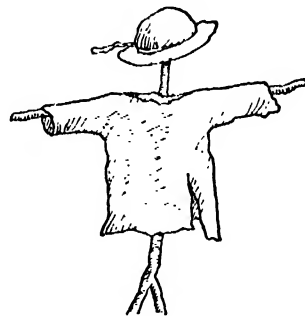
Egg (with two lands). Nest (with two hands).

Clay Modelling—BIRD'S NEST



Directions.—A piece must be broken off for the eggs. Nest is made from ball by pressing in thumb of right hand. Ball must be held in hollow of left hand. Each egg is made from a small ball and placed with the broad end towards the outside of nest. Scratch roughly round with the head of a pin or modelling tool, and place when finished on real twig.

Brush Work SCARECROW



Directions.—Tree, brown; coat, scarlet; hat, brown. Paint in the square-shaped coat and sleeves. The brown stick, arms, and feet are done next, and hat is painted last.

Chalk Drawing on Brown Paper—NEST WITH EGGS



Directions.—The nest is made first from the oval with reddish-brown chalk. Eggs are put in with pale blue, and a faint white tint is given to the top curve of each egg.

Object Lesson—EGGS AND CHICKENS

PREPARATION.—Show birds' eggs used in last week's lesson, and let children compare with the hens' eggs to be taken this week. They tell all they know about eggs, their appearance, use, &c.

PRESENTATION.—(a) **The Nest.**—Mother hen likes a rather dark place for her nest, which must be made of clean fresh hay, not too deep, or the eggs might lie on top of each other. This must not be, as each egg must be open to ventilation.

After laying about a dozen eggs, the hen becomes broody, and covers the eggs with her feathers night and day for three weeks, rarely leaving the nest except for food.

(b) **The Egg.**—Those eggs with smooth fine shells and of an average size are the best for hatching purposes. Inside the shell is a double lining of thin tough "skin". One coat clings to the shell, and a finer one wraps round the white of the egg. An egg should be broken, and both these shown to the children. Just at the broad end of the egg the two coats separate and form a little air space, which is very necessary to the young chicken. The children will see also a small white disc on the upper side of the yolk just beyond the centre. This is always kept on the upper side by two cords made of white of egg and fastened across to shell sides. This white disc eventually becomes the chicken, so is therefore the most important part of the egg.

The eggs are laid with their small ends to the centre. Why?—The hen settles down on the eggs with her feathers fluffed out to form a soft warm covering. Such a light covering it is! It rises and falls with every breath the hen takes, and thus allows gases to escape from the eggs which would otherwise turn them bad and kill all life inside. These gases are made by the formation

of the chick inside the egg. In time the under side of the hen's body becomes very warm, so that the centre eggs might get more heat than was good for them. The outer eggs are cooler, so mother hen changes their places. Making a hook of her beak and neck, she drags them to their proper positions. The eggs are thus kept at an equal temperature during incubation. In cold weather the hen is so careful of her eggs, that she will scarcely leave her nest even for food. Often she will go three days without eating or drinking. In warm weather, however, she will apparently desert her nest for some hours. Sometimes in hot weather she will stand up and lift her wings to admit cooler air to the eggs. Every few minutes she will open out her feathers so as to make a draught of cool fresh air over the eggs.

By the tenth day it is quite easy to tell which eggs have young chicks in them. The teacher should show an egg during incubation and one not fertile. The children will soon see the dark, evenly-cloudy appearance of the former and the clear lightness of the latter.

(c) **Growth Inside the Egg.**—This goes on at the expense of the white. Compare bulb flower when the baby plant feeds on the thick scale leaves. The yolk is not used for food until the last day, when it is absorbed into the chicken's body, and forms a valuable store of food for the first day or two the chick spends out of the shell.

On the nineteenth day the chicken pricks the air space and breathes through its lungs. Every few minutes, as it uses its lungs, a tapping sound can be heard. By and by the chick gives a tap with its horny, sharp, scale beak. This tap is repeated every few minutes, until at length the shell is cracked

and lifted little by little. On the last day the chicken pushes through the lining membrane and, stepping through the cracked shell, makes its appearance. It presents a funny picture with its wet body only covered with unopened pin feathers. Soon it cuddles close to the warm mother hen, and in time grows dry and happy.

(d) **The Chickens.**—The sheaths of the feathers burst, and the chickens become covered with a soft downy wrap. For a day or two they need no food, thanks to the yolk of the egg they ate the day before leaving the shell. Then ground grain, boiled rice, or old bread soaked in water or milk is

good food for these young ones. Very soon they begin to learn to pick up food for themselves; their mother is a patient teacher and the chickens quick pupils.

ASSOCIATION.— Compare with the care the mother bird takes of her young the mother tree of her buds and the mother bulb of her baby plant.

FORMULATION.—

“Where’er we go, or east, or west,
The mother’s love is always best.”

APPLICATION.— Repetition of poetry, singing, games, and story-telling in connection with the lesson.

Phonetics

PART I.—*Breathing Exercises.* PART II.—*Sounds “ch” and “j”.*

(i) **EXERCISE 1.**—*1st Movement.*—Hands above heads, palms to front, thumbs touch; inhale. *2nd Movement.*—Trunk bend, fingers touch floor, knees rigid; retain breath. *3rd Movement.*—Back to position; still keep breath in. *4th Movement.*—Attention; exhale as arms describe a circle to sides.

EXERCISE 2.—Children are arranged in a ring round weathercock—a boy wearing a cut-out cardboard cock on his head. (See this week’s story, “Little Half-chicken”.) Various sections of the class blow for N., S., E., or W. wind at teacher’s signal, and weathercock turns accordingly.

(ii) A picture of chickens running round a jar which contains corn is put before the class. The words “chick” and “jar” are

printed. The sounds “ch” and “j” are treated in a similar manner to that used in previous phonetics lesson. Children describe in their own words that the sound “ch” is made by forcing the breath between the front teeth and the tip of tongue, which touches the hard palate. The lips move outwards. “j” is formed in the same way, and sounds very much like “ch”, but the throat takes part in the production of this sound.

Suggested sentences for reading after sound has been taken:—“‘Chuck, chuck!’ cries Charlie with the jar. ‘Children’, says the hen, ‘jump and run to him.’ ‘Cheep, cheep!’ say the chicks, ‘just see us!’ The jar had cherry jam in it. Now it has chicken food.”

Number

6 in. = $\frac{1}{2}$ ft.; 6 hr. = $\frac{1}{2}$ the clock round; clock figure, VI (Roman numeral).

Last week children saw the need for a smaller measure than a yard. This they

had in the foot. Teacher tells children to measure a book with the foot-rule. The rule is seen to be too long. Children examine the rule and note its divisions into

12 equal parts called inches; therefore 1 ft. = 12 in. Teacher tells them they are not going to trouble about the whole of the 12 in. to-day, only about half of them. Children find out by placing the tip of finger where they think the middle is, and counting the inches at each side. (*N.B.*—Division of 12 by 2 comes at a later stage.) They find that $\frac{1}{2}$ ft. = 6 in. Exercises are given which bring in half-feet, inches, &c.

"A boy I know gets up at 6 o'clock in the morning and goes to bed at 6 in the evening. He stays up all morning and afternoon." Teacher produces a cardboard clock-face and points the hour hand to VI. As she moves it round to 6 again, children count the number of hours. They tell that the boy stays up 12 hours—"all the clock round". "George, turn the hour hand half

round the clock. How many hours is that? So you see how many hours there are in half a day." Questions are asked on hours of the day not exceeding 6.

Teacher tells the history of the signs for Roman numbers I, II, III, IV, &c., in suitable language. At first, and for some time, the people of long ago could only count up to five—the number of the fingers on one hand—and the signs for these were I, II, III, IIII, IIIII. The second stage in writing these signs was in writing the number five. The sign "V" probably originated in the hand held with the thumb to one side and the other fingers together on the other side. As the necessity for counting larger numbers grew, the five fingers of the other hand were thought of, and one more stroke was added to "V" for each finger.

Story—THE LITTLE HALF-CHICKEN

An old mother hen sat on her nest and kept her eggs warm day and night. At last, when three long weeks had gone—crack! crack! went the eggs, and out came the little chickens. Such darlings they were, with their downy yellow bodies and tiny wings! And how proud their mother was!

In spite of this, she was not satisfied; there was still one egg to keep warm. For two more days she sat and waited, then crack! crack! went the egg, and out stepped the funniest little chicken in the world.

It was as black as soot, and had only one tiny wing, one little leg, and one wee eye; so that you see it was only half a little chicken after all. It was so funny, that when you looked at it you wanted to laugh. The strangest thing about this chicken was that half of it wanted to be a good little chicken, while the other half was as naughty as could be.

One day the naughty Little Half-chicken

went up to the mother hen—hippety hop! hippety hop! "Mother, I don't want to stay here in the farmyard any longer. I am going to the palace to look at the king." "Oh, my dear child!" said the mother, "you frighten me so when you talk like that. Little chickens should stay at home under their mother's wing." But the Little Half-chicken shook its head, and flapped its one wee wing, and winked its one tiny eye, and said, "Cheep, cheep! Goodbye;" and off it went, hippety hop! hippety hop! out of the farmyard.

It went hopping down the road until it came to a fire burning by the roadside. "I say, Little Half-chicken," cried the fire; "ho, ho! Little Half-chicken, do help me! Bring some sticks with your tiny beak so that I may burn more brightly." But the Little Half-chicken shook its head, and flapped its one wee wing, and winked its one tiny eye, and said, "Cheep, cheep—no! I'm in a

hurry; I'm going to the palace to look at the king." Off it went, hippety hop! hippety hop! down the road. At last it came to a brook running across the road. "I say, Little Half-chicken," said the brook; "ho, ho! Little Half-chicken, do help me! Carry these little stones away with your beak so that I may flow more gently." But the Little Half-chicken shook its head, and flapped its one wee wing, and winked its one tiny eye, and said, "Cheep, cheep—no! I'm in a hurry; I'm going to the palace to look at the king." Off it went, hippety hop! hippety hop! down the road. It hopped along until it came to a bramble bush and heard the wind moan, "I say, Little Half-chicken; ho, ho! Little Half-chicken, do help me out of this prickly bush!" But the Little Half-chicken shook its head, and flapped its one wee wing, and winked its one tiny eye, and said, "Cheep, cheep—no! I'm in a hurry; I'm going to the palace to look at the king." And away it went, hippety hop! hippety hop! until it came to the palace.

Now the cook at the royal palace was in the yard looking for something for dinner, and when she saw the Little Half-chicken come into the yard, hippety hop! hippety hop! she seized and put it in a pan over the fire. "Ho, ho!" cried the Little Half-chicken in fear; "please, Fire, do not burn me." But the fire only crackled away and said, "No, no; I cannot help you now. When I needed help you were in a hurry, and so I have no

time to help you." At last, when the Little Half-chicken had been boiling some time, the cook lifted the lid of the pan. When she saw that the Little Half-chicken was a black little half-chicken, she threw it out into the yard. It would not do to serve the king with a *black* chicken.

There was a little brook running through the yard, and so the Little Half-chicken called out, "Ho, ho! please, Brook, do cool me; I am so hot." But the brook only rippled along gently and said, "No, no; I cannot help you now. When I needed help you were in a hurry, and so I have no time to help you." At last the Little Half-chicken heard the wind roaring as it came rushing through the yard. "Ho, ho!" cried the Little Half-chicken in great fear, for it felt the wind carry it higher and higher in the air; "please, Wind, do not toss me about." But the wind only whistled and said, "No, no; I cannot help you now. When I needed help you were in a hurry, and so I have no time to help you." Higher and higher went the Little Half-chicken, until it came to the top of a high church spire, and there it stuck. The Little Half-chicken had become a weather vane!

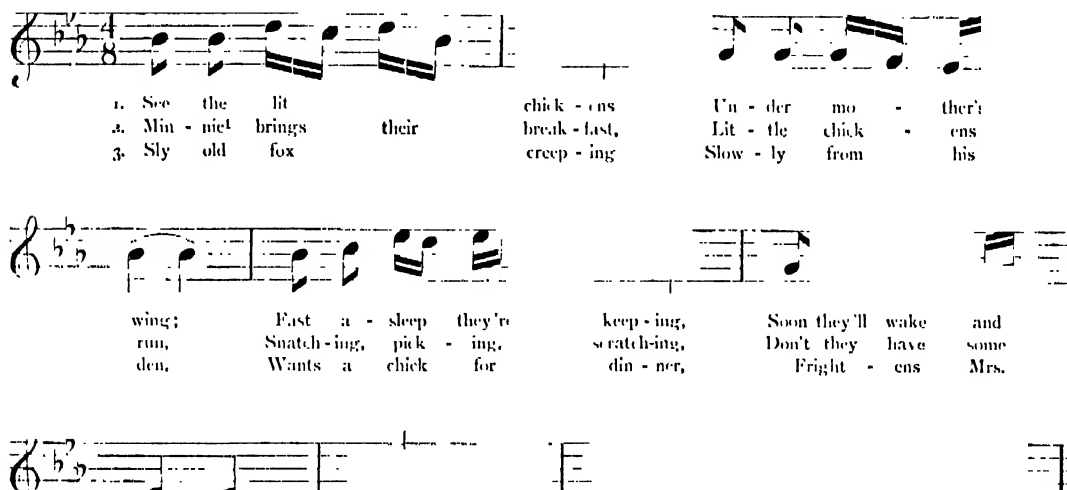
Whenever any of the other little chickens want to leave their mother's wing, she sighs, and tells them of the Little Half-chicken which, because its naughty half was master, became a weather vane.

Other stories are:—"What the Moon Saw"—Hans Andersen. "The Golden Goose"—Grimm. "The Ugly Duckling"—Hans Andersen, *Favourite Fairy Tales*, "Blackie's School and Home Library". "Death of the Cock"—Grimm (Adapted). "Adventures of Little Cock and Hen"—Grimm.

Song—"LITTLE CHICKS, WILL YOU DANCE NOW?"

—Song Garden for Children (Publisher, Edw. Arnold).

Game—CAREFUL MRS. HEN



1. See the lit chick - ens Un - der mo - ther's
 2. Min - nie! brings their break - fast, Lit - tle chick - ens
 3. Sly old fox creep - ing Slow - ly from his

wing; Fast a - sleep they're keep - ing, Soon they'll wake and
 run, Snatch - ing, pick - ing, scratch - ing, Don't they have some
 den, Wants a chick for din - ner, Fright - ens Mrs.

He! Peep, peep! Peep!
 Flap, flap! Flap! Flap!

4. "Cluck!" she calls out wildly,
 "Chicks, there's danger near;
 Mr. Fox is watching,
 Chicks, come here! Come here!"
 Cluck, cluck! &c.

5. "Here's a safe, kind shelter.
 Chicks, come under, then
 Mr. Fox must run back
 Hungry to his den."
 Ha, ha! &c.

¹Any name.

Directions for Game.—*Verse 1.* Several of the older girls are chosen for hens. They hold out their pinafores for wings. The tiny children crouch beneath the wings and pretend to sleep.

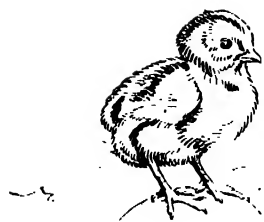
Verse 2. A little girl carrying an imaginary basket on her arm pretends to take out a handful of corn and scatter it on the ground. The chickens run out and pick up the seeds.

Verse 3. The fox—a bigger boy—creeps out of his den, represented by two rows of children facing each other, each child with hands on shoulders of the child opposite. The frightened hens flap their wings.

Verse 4. Hens cry "Cluck, cluck!" waving wings wildly, and sing "Chicks, come here! Come here!"

Verse 5. Chickens run under the wings, and the baffled fox slinks back to his den.

Blackboard Reading and Drawing



"Peep, peep, Good day! I am two weeks old to-day. I lived in a tiny shell house When I was born I had no feathers, but now they are beginning to grow. My legs are

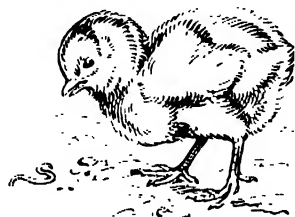
thin, but they will soon grow strong like mother's.

At night I sleep under her wing. She tucks her head in too! Oh! is that a worm? I am

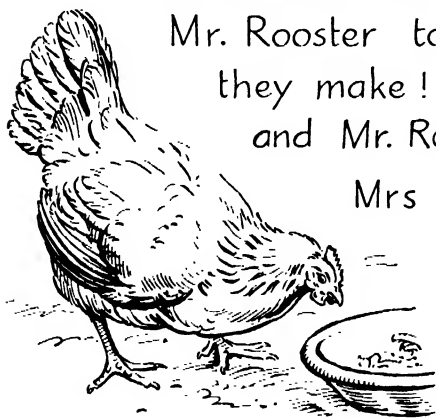
hungry. How good he was

'Where is my mother? I must tell her that I ate a

worm. She is looking for her dinner. I have had mine. Am I not a clever chick, and only two weeks old!"



When Mrs. Hen lays an egg, she runs to find Mr. Rooster to tell him. What a noise they make! Mrs. Hen cries, "Cut-cut-cut-cut!" and Mr. Rooster crows, "Cock-a-doodle-do!"



Mrs Hen does not chew her food. Tiny bits of stone or sand grind it up in her gizzard like a grindstone. If you come near her chicks Mrs. Hen

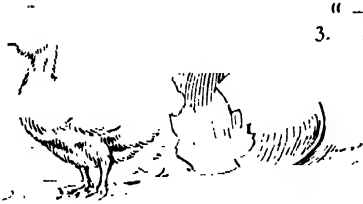
will peck you. She loves her chicks.

The Duckling's Story.



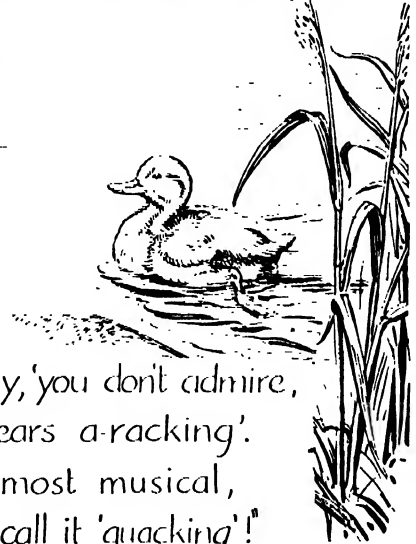
1. "Four weeks I lived inside an egg,
Slowly, slowly growing
Yes! getting bigger every day!
— Though how there is no knowing!

2. "At last one day with tap! tap! tap!
My beak the shell was breaking,
And out I stepped—Oh! what a fright!
With fear I stood there quaking.



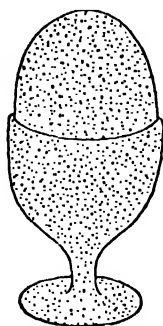
3. "The world, so big, quite frightened me,
I was a silly creature!
With fluffy body, yellow beak
And scarce another feature.

4. "My feet look ugly', do you say?
Why, no! they're made to
paddle;
And if I swim so
gracefully
What matter—
if I waddle!

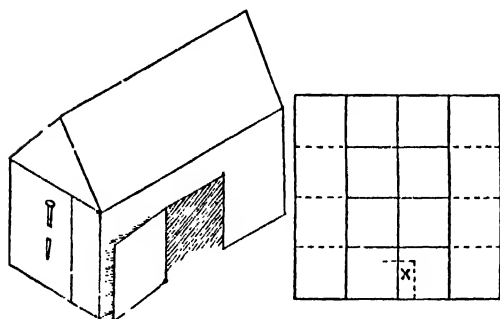


5. "My voice', you say, 'you don't admire,
It sets your ears a-racking'.
My singing is most musical,
Oh, shame, to call it 'quacking'!"

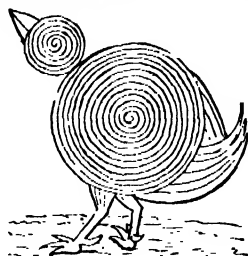
M. B.

Paper Cutting—EGG IN CUP

The egg should be cut out in a complete oval. The cup, cut out of coloured paper, is placed over part of the egg as indicated.

Paper Modelling—FOWL HOUSE

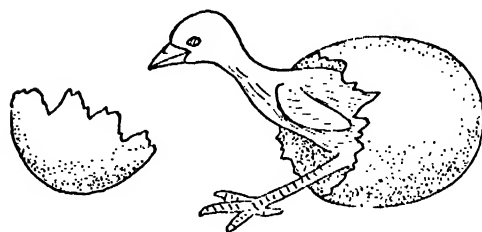
Cut along dotted lines. The lines marked x are for door, which can be folded back.

Free-arm Drawing—CHICKEN

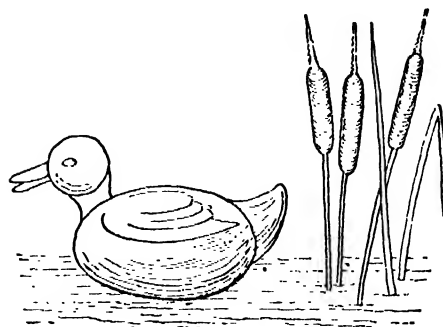
Made from two circles drawn in spiral form. No patching up lines should be allowed.

Clay Modelling—DUCK EGG

Made from sphere by drawing out one end with tips of fingers.

Brush Work—CHICKEN STEPPING OUT OF EGG

Egg Chinese white with touch of blue. Chicken in yellow.

Chalk Drawing—DUCK SWIMMING

Duck's body drawn from ellipse; head from circle. Duck, white; beak, yellow; water, blue; rushes, green and brown.

Object Lesson--EARTHWORMS

PREPARATION.—The object of the lesson is to teach children that though the worm is so despised, it does a really valuable work. The children must become imbued with the spirit of the poet who wrote:

“I would not enter on my list of friends
The man who needlessly sets foot upon a worm”.

Each child should look out for worms to bring to school before the lesson. If these are kept in boxes of earth under as nearly natural conditions as possible, the children will have good opportunities for examining and appreciating them.

All nature is waking about this time; the children will have described the thaw, rains, and the warm spring sun in the weather-observation lessons. The earth is softened, and worms are tempted to the surface—they may even be seen crawling across the paths.

PRESENTATION.—(i) *Appearance.*—Long thin body; compare with lead pencil. When the children see the worms they will probably say that worms are earth-coloured. If the worms are put in a glass of water, the children will clearly see the pinky colour which is due to the red blood. The body is composed of about one hundred rings. It has no head as distinct from the body, but the head end of the worm is slightly pointed. Why is this necessary? The mouth has a small protruding lip, which is useful for seizing hold of leaves and small stones.

The worm has no legs; it moves along by means of bristles which grow out of each ring. These hair-like bristles can be drawn in at will. Show necessity for this during burrowing. The bristles enable the worm to move backward or forwards.

There are no ears, and yet the worm can tell when anyone approaches. Its skin is so delicately sensitive, that it can feel even

so slight a vibration as that made by a bird's foot some distance away. It has no eyes, and yet it is sensible of light and darkness. When it feels the shadow of an enemy it will wriggle back into its burrow. This keen sensitiveness is of great value to the worm, which, on the approach of a mole, will wriggle vigorously to the surface again.

(ii) *The Work of the Worm.*—(a) **Burrowing.**—The worm burrows with its head a tunnel several feet long. It is aided by a sort of slime which it secretes. When the ground is soft it has only to bore with its head and exude the slime, which prevents much uncomfortable friction. When the ground is very hard, the worm has to eat its way through. (See under “Bruising”.) Thus the worm is like a tiny plough which slowly but surely loosens the soil. As a result of continued burrowing and falling in of old burrows, the surface of the earth is kept in motion, and in the course of time all becomes exposed to the action of the air. The earth, which has lost in richness from exposure to the sun and weather, is covered and shaken loose by this boring animal.

(b) **Burying.**—The earthworm eats leaves and parts of decayed plants. These it carries down to its “nest”. They are torn up and covered with a fluid which the worm exudes, and left until the worm is ready to eat them. These decayed and buried vegetables and leaves make the soil rich and valuable.

(c) **Bruising.**—The worm sometimes swallows the earth for two reasons: firstly, because the earth is too hard for the worm to bore through; and secondly, because it contains remains of plants and other matter which is extracted for food by the worm. When a certain amount has been swallowed, it is ground up in the gizzard of the worm, and becomes finely sifted soil. Compare

work of hen's gizzard. The worm comes up to the surface to get rid of the powdered earth, which is now of no value to it. It casts it on the ground in tiny heaps called "worm casts". These fine earth worm casts are specially valuable and suitable for the growth of vegetation.

(iii) *Habits of the Worm*.—Lives in the slightly enlarged end of a burrow. These burrows are often several feet in length. Here the worm sleeps in cold weather, coiled up with others in a ball. The passage or burrow is lined with a fluid which enables the worm to reach the surface quickly and easily.

It seizes its food by the mouth and carries it to its hiding-place. This habit of burying small bits of vegetation is good for the soil.

The worm lies for many hours in the day close to the mouth of the burrow. This it covers with leaves, straws, and any other article which would deceive the worm's ene-

mies. The leaves help to keep the burrow damp and agreeable to the worm. The worm does not often leave its burrow, and even at night anchors itself by the tail to its hole, so that it may easily wriggle out of danger.

ASSOCIATION.—Associate with other lessons on spring's awakening time.

FORMULATION.—Worms, although usually despised, are really valuable. They bore into the earth, loosen it, and make passages for the rain to flow towards the roots of plants.

They draw leaves, straws, and stalks into the earth for food. These enrich the land.

Worms throw up lumps of fresh fine soil which cover the poorer, worn earth and give it time to become rich again.

APPLICATION.—Apply to lesson on kindness to animals, and show need for helping those who cannot help themselves, and protecting the weak. See also "Kindergarten Occupations".

Phonetics

PART I.—*Exercises in (a) Breathing and (b) Tone Control.* PART II.—*The Sound "r".*

(i) (a) Teacher plays the ascending scale on the piano, while the children inhale slowly through the nostrils. The top note is struck loudly to tell children to get ready to breathe out. They do this while teacher plays the descending scale.

(b) "Let us pretend we are standing in Newton Road" (teacher gives a local name), "where the electric cars run. We will wait until a car passes. Hark! there is one quite a long way off; it sounds just like a whisper. It is drawing nearer. Can you hear the sound growing stronger and louder? Here it is. What a noise! There! it has passed us; the sound is getting faint and fainter still. Nearly gone—only a whisper—gone!" Children pitch on any note they choose (the greater the variety the better the effect), and sing "r - - -". At the same time they lift both hands to the left, and as the car draws

near the hands move gently until they are straight out from the shoulders when the sound is loudest. As the hands pass towards the right, the sound, gradually growing softer, dies away.

(ii) Teacher produces record—a picture of a car with "car" printed on it. As children make the sound of the car (see under (i) (b)), teacher points to "r" in car. They tell how sound "r" is made by the mouth. When it is followed by a vowel—e.g. ring, Robert—the tip of the tongue curls up. As it uncurls it drops downwards and strikes the hard palate just behind the front teeth. The breath is forced between the upper front teeth and tongue.

Sound connected with nature lesson:—"The worm's body is round. It has many rings. Robin likes worms."

Number

General work on Number 6.

A worm wriggled out of its burrow at 4 o'clock one bright morning and stayed away until 9, when it crept back again. How many hours had it been away from home?

One worm measures 3 in. from its head to its tail. How much would 2 such worms measure, put head to tail?

A worm lived deep in the earth. Its nest was $1\frac{1}{2}$ yd. from the mouth of the burrow. How many feet was that? How many more feet to make 2 yd.? If it took the worm $\frac{1}{2}$ hr. to crawl 3 yd., how far could it get in 1 hr.?

Tom sets out to find worm casts. He wants to find 6, but can only see 2. How many more must he find?

Tom is trying to save 6d. to buy a spade. He has saved 6 halfpennies already. How much more does he want? Suppose his

aunt gave him $1\frac{1}{2}$ d., how much would he want still?

Nellie, Tom, and Baby have a kind uncle. He gave them 6d. to share amongst them. How much would each get? How many halfpennies is that? Baby was too young to spend her twopence, so she shared it between Nellie and Tom. How much have they each now? How many ha'penny oranges could Nellie buy with her 3d.?

Nellie and Tom wanted a strip of garden. Father said they might have a piece 2 yd. long. How many feet is that? They had half each. How many feet? Nellie divided her share of 3 ft. into pieces $\frac{1}{2}$ ft. long. How many pieces?

Tom planted half a dozen primrose roots in his part of the garden, but the worms spoiled one-third (or one-half). How many did they spoil?

Story—THE BUSY WORMS

An old worm was teaching a young one to make a home.

The young worm was cross and unhappy. "Why," it said, "must we make a nest? Why cannot we find one ready-made?" The old worm answered, "You do not know what you say. A home which is ready-made does not make one happy. See the birds—those dreadful enemies of ours how they work. They love their home, which costs them so much." "But they have wings, and can fly up into the sky," said the young worm. "That is true," was the answer, "but if we cannot fly we can crawl in and out of places where a bird could never go." "They have eyes, too, and can see; we cannot even see when our enemies are near," said the young worm. "What should we do with eyes? If we had eyes we might grow

discontented, and then what would become of the earth we are always digging?" "We have not even ears," said the young worm. "You surely do not wish for ears," answered the other. "Though we cannot hear, we can feel when a stranger is coming. Come, now, and let me show you how to make home as safe as the nests of those wonderful birds."

The old worm began to burrow into the earth with its pointed head, and the little one followed it. "Why does not the earth hurt our sides?" it asked. "Because there is something coming out of our bodies which covers the sharp and hard pieces and makes them slippery." When they came to a very hard piece of earth, the old worm showed the young one how to make a way through by swallowing it in very tiny pieces. When they could eat no more they crawled back to

the mouth of their tunnel and cast the earth out of their bodies. "Can the birds do that?" asked the young worm; and when the old one answered "No", it turned more cheerily to its work.

Farther and farther they went, oh, so slowly! until they came to a few tiny stones. "Ah, here we will make our nest!" the old worm said. It taught the young one to move the stones and drag them along. Very soon they had a little room built. It was not a room with a door and window and fireplace—oh, dear no!—but a room where the floor and walls and ceiling were all of small stones. They did not need windows, for they had no eyes. They did not want carpets either, for the slime which came

from their bodies made a smooth lining for their little stony nest.

When the home was finished the young worm wanted to rest, but the old worm said, "Our work is not done yet; we must hide the hole which leads to our nest." Very cleverly they carried some leaves and laid them across the mouth of their burrow. "Now we can rest," said the wise old worm; "we have no need to fear the birds; they cannot find us now. Come, let us curl round each other to keep warm and go to sleep. Good night." Then these two busy workers, who had built a real home, although they had neither eyes nor ears, hands nor feet, rolled up in a ball and went to sleep. Do you not think they were very clever?

Song—"WHEN THE EARTH WAKES UP IN GLADNESS"

—Songs for Little Children (Curwen).

Game—THE EARTHWORMS

Do the dark-ness we creep, Where the bright flow-ers

sleep; In-wards, still wards, like

go; Out-wards, still out-wards, with move-ment slow.

2. Upwards and downwards we dig, we dig,
Working like spades, though we're not very big,
Turning and twisting, both great and small;
So you see, children, there's work for all.

Directions.—*Verse 1.* Children form one long line as for marching. They hold hands on the shoulders of the child in front. Slowly the first child works inwards with a spiral movement, and the other children follow. At the word "outwards" they follow the leader, who represents the head of the worm, and proceed to unwind.

Verse 2. "Upwards and downwards"—these movements are made by children, who hold their hands together above their heads and pretend to pierce through the earth. At the word "spades" they imitate digging. At "turning and twisting" they place hands again on shoulders in front and follow the leader, who works his way in a wavy direction.



See me! I am a worm. Please do not kill me. I am very useful.

I will tell you about myself. I live in the earth. I made my own little house. There I curl myself up, and go to sleep. I must go through a tunnel, to get to my house. I made that tunnel too. Don't you think me clever to do all

this without hands? When I come out of the earth, I keep my tail in my burrow. I have no eyes; but I can feel when anyone comes near.

Ho! I know a bird is near. Mr

Robin

wants me for his dinner.

I will

wriggle back to my nest

until he

has gone. When I am

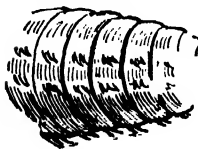
hungry, I

carry dead leaves

to my nest, and eat them there.



Sometimes I swallow the earth as I creep along, and find good food in it. Then, when I get to the top, I cast the earth out of my body. Here is a picture of my "cast." Worm casts are good for flowers and growing plants. My body is made of many rings. Although I have no legs yet each ring has some tiny hairs. By these hairs I can

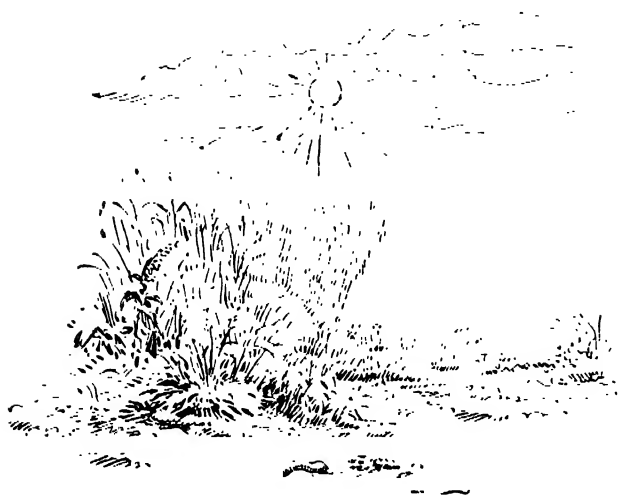


creep along. When I like I can draw them in.

Can you draw the hair on your head in?

The Happy Worm.

1. A worm wriggled out on a warm Spring day,
Up to the sunshine
making its way,
Feeling the sunbeams'
loving ray.



2. "Ah! Long I've slept
through winter's night,
But at last, I know,
it is Springtime bright;
And, though I can't see, yet I love the warm light."

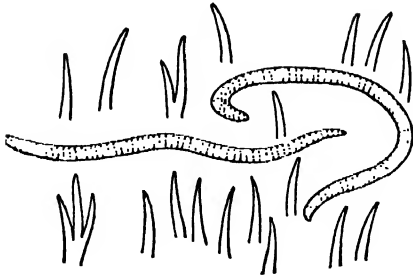


3. "So now the cold winter has gone away,
I'll dig the soft earth like a spade all day;
Turning and twisting, no time for play."



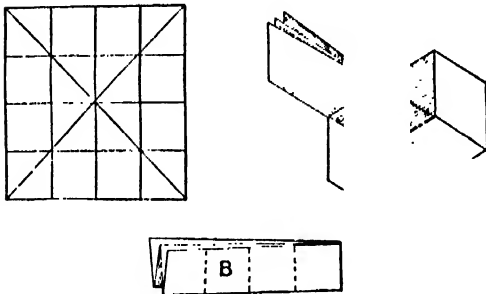
M. B.

Paper Cutting—WORM IN GRASS



One portion of class cut grass, the other worms.

Paper Folding—SPADE: A DIGGER LIKE THE WORM

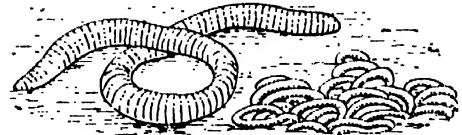


Fold as in fig. 1 and then fold 2. Hold B between finger and thumb of left hand. Press down middle fold with right hand, and push towards finger and thumb of left hand.

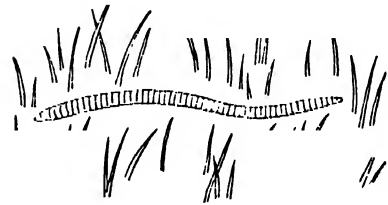
Free-arm Drawing—BIRDIE'S BREAKFAST



Clay Modelling—WORM AND CASTINGS

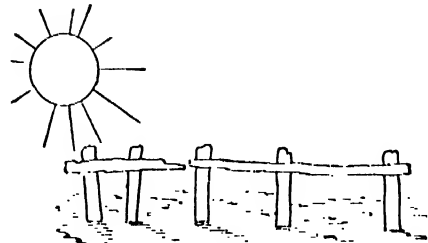


Brush Work



Thin brown madder for worm and sap green for grass.

Chalk Drawing · WORM THAT WAS GLAD TO BE ALIVE



Colours as desired.

Object Lesson—FROGS AND TADPOLES

PREPARATION.—The teacher must get the children to bring frog spawn to school for a week or two previous to the lesson. If this is kept in glass jars on the classroom window ledge, the children can watch the development of the spawn into tadpoles, and of the tadpoles into frogs. If this plan be followed, the tadpoles will be in varying stages of growth, and therefore suitable for examination as each stage is described.

The teacher should get the children to talk of the many signs of awakening life: the leaf buds have awakened and are beginning to grow; the birds have come back and are building their nests; the newly hatched chickens are running about the farmyard; and the flowers are beginning to peep above the ground. Besides all this, Mrs. Frog has left her winter bed at the bottom of the pond and has laid her many eggs.

PRESENTATION.—(i) **Stages of Growth.**

—(a) The frog's eggs can easily be seen on any pond near the banks, where they have possibly been blown by the wind. They are like tiny specks of black surrounded by a sort of jelly, which grows until it (the jelly) is about the size of a pea. These jelly "balls" cling together in hundreds, so that a child can obtain any number of eggs.

(b) After about a week the black specks lengthen into a head and tail, and now a good deal of wriggling is seen. A mouth comes into the head, but no ears or eyes are to be seen yet. For some time the young tadpole eats away the jelly which surrounds it. Compare chicken in egg. By and by it will have eaten a hole large enough for it to wriggle out into the water away from its slimy bed. It must be very careful now that it has left this protective covering which kept it from being eaten—frog spawn

is too slippery to be pleasant to birds or easily seized by them.

(c) The young tadpoles now hang together by their mouths to weeds and plants in the water. They can be seen in small groups nibbling away as if for very life. They are enabled to do this because their mouths have grown hard and their upper lips horny. About this time a pair of gills appear, one on each side of the tadpole's head. By means of these gills the tadpoles get the air out of the water in the same way as the fishes. This stage in the tadpole's growth can be described as "eat, wriggle; eat, wriggle".

(d) The next stage in the development is that the tadpole begins to swim. Its eyes and ears are beginning to grow, and the noseholes can be distinguished. The outward gills shrivel and become covered up. The tadpole must now swallow the water and send it out through the "cover" after taking from it all the air it can.

(e) The hind legs grow out first, long and strong. The front legs cannot be seen very easily for the "cover", but soon they appear, much smaller than the hind ones. The gills have now quite disappeared, and "air bags"—lungs—have taken their place. It is now necessary for the frog to come to the surface to breathe. Children should be shown the need for some object in the water which by its raised position allows the young frog to put its head above the surface of the water. In some cases where children have kept young frogs, these latter have been drowned because their transformation from gilled creatures to lunged animals had not been taken into account.

(f) The tail grows smaller and smaller, because it is being sucked in to feed the

body of the young frog, who does not now care for plant food, but begins to look out for tiny animals to eat. *N.B.*—Unless food of this type is put in the receptacles for the young frogs, they will probably begin to eat one another. With the disappearance of the tail, the last stage in the development of the young frog may be said to be complete.

(ii) **The Frog.**—Its head is flat and unprotected, hence the necessity for the two protruding eyes which enable the frog to see all round easily. These eyes can be drawn in at will by the frog. Show children the reason why this is good. When frog swims about the pond this might be full of rootlets, &c., which would hurt the eyes. The frog has two flat ears. Again show use of these, and their adaptation to frog's mode of life. The frog's tongue is covered with a sticky substance which is of great value in catching insects, flies, &c. The tongue is attached to the front of the mouth, and therefore can be darted out to quite a considerable distance.

(iii) **Habits of the Frog.**—It lives on the land in summer, and feeds on such prey as it can catch with its tongue, viz. worms, flies, and other small insects. The speed with which it can dart out its tongue and draw it in again is surprising.

It is a very defenceless animal, and therefore always on the alert to see or hear enemies. Its long hind legs act as a double spring, and allow the frog to leap great dis-

tances. Let children describe their games of "leapfrog". Its front short legs are used to help to cram food down its throat. It is interesting to see a frog deal with a wriggling worm. The front feet have four toes, while the hind feet have five. These five toes are joined together by a skin which helps the frog to swim quickly. Compare duck's webbed foot.

In winter the frog cannot find food on the land; worms have gone to their burrows far below the hard surface of the frozen ground, and the flies and insects are dead. It then swims to the bottom of a pond, settles itself in the mud, and goes to sleep until the next spring.

ASSOCIATION.—Associate with the wonderful development of broad green leaves from hard brown buds, lovely flowers from small dark bulbs, and downy yellow chickens from apparently uninteresting white eggs.

FORMULATION.—When tadpoles are young and unable to take care of themselves, Mother Nature looks after them just as she does the young leaves, flowers, and birds.

Spring is the growing time for all young "children".

The tiny egg of the frog contains the young tadpole, and therefore the young frog, just as surely as the egg contains the baby bird.

APPLICATION.—See "Kindergarten Occupations" and "Blackboard Reading".

Phonetics

PART I.—*Exercises in (a) Breathing and (b) Tone Control.* **PART II.**—*Sounds "t" and "d".*

(i) (a) Children stand firmly on both feet.
1st Movement.—Arms upward bend, chest thrown out; innale. *2nd Movement.*—Arms upward stretch, heels raise; retain breath. *3rd Movement.*—Arms bend, heels sink;

breath retained. *4th Movement.*—Arms to sides; breath exhaled.

(b) "I have brought my violin to school. See me play it. Notice how gently I draw the bow across the strings to make a

long sweet note. Now hear me." Teacher makes a long note as evenly as possible. "Now you shall pretend to have violins, and make them sing the same note." If a violin is not obtainable, teacher can chat about the violinist at the concert. She pitches a note about "G" for the class to sing. They hold imaginary instruments with their left hands and, slowly drawing right hand across the strings, they sing a long, sweet, humming note.

"Feel the top of the desk. How smooth it is! Let us try to sing a note as smooth and even as the desk top." Teacher gives the pitch, and children sing "lah", "oo", or

"aa" as they pass their hands slowly along. The smoothing action helps to keep the volume of tone even.

"Now hold pencil in left hand and draw pointer finger along as you sing this note." Teacher gives another note.

(ii) Sounds "t" and "d" are introduced by showing live toad or picture of one. Children find first and last sounds in "toad". They tell how "t" and "d" are made in the mouth. By putting fingers to throats they contrast the light "t" with the guttural "d". Record of lesson:— Drawing of toad marked *toad*.

Number

Number 7.

(i) Teacher draws an upright oblong on board and divides it with a line across the middle. She prints number-picture 6 in the lower division and 1 in the centre of the upper part. (Number-picture 6:— 6 good-sized circles massed in with chalk, arranged like the dots on a domino.) The following figures, printed at the side, show the work taken:—

$$1 + 6 = 7$$

$$7 - 1 = 6$$

$$6 + 1$$

(ii) Another oblong drawn and divided; picture 5 in the lower and 2 in the upper half. Following exercises are worked from the pictures:—

$$2 + 5 = 7$$

$$7 - 2 = 5$$

$$5 + 2 = 7$$

$$7 - 5 = 2$$

(iii) Next oblong divided in halves; pictures 4 and 3 printed in lower and upper

halves respect. ely. Children work these exercises:—

$$3 + 4$$

$$7 - 3$$

$$4 + 3$$

$$7 - 4$$

(iv) Oblong divided into three. Top portion has 1 large dot in centre; middle, 2 dots; and lowest division, picture 4. The accompanying figures show the exercises which can be worked from these pictures:—

$$\left. \begin{array}{l} 1 + 2 + 4 \\ 2 + 4 + 1 \\ 4 + 1 + 2 \\ 2 + 1 + 4 \\ 1 + 4 + 2 \\ 4 + 2 + 1 \end{array} \right\} = 7.$$

(v) The following are other number-pictures—oblongs divided into three parts—with their respective exercises:—

(a) Top division, 2 dots; middle, 2; lowest division, 3—

$$\left. \begin{array}{l} 2 + 2 + 3 \\ 2 + 3 + 2 \\ 3 + 2 + 2 \end{array} \right\} = 7.$$

(b) Top division, 3 dots; middle, 1; lowest division, 3—

$$\left. \begin{array}{l} 3 + 1 + 3 \\ 1 + 3 + 3 \\ 3 + 3 + 1 \end{array} \right\} = 7.$$

(c) Top division, 1 dot; middle, 1; lowest division, 5—

$$\left. \begin{array}{l} 1 + 1 + 5 \\ 1 + 5 + 1 \\ 5 + 1 + 1 \end{array} \right\} = 7.$$

(d) Top division, 2 dots; middle, 3; lowest division, 2—

$$\left. \begin{array}{l} 2 + 3 + 2 \\ 3 + 2 + 2 \\ 2 + 2 + 3 \end{array} \right\} = 7.$$

All the above exercises are worked concretely with counters, cowries, or sticks, and then set down on boards or in children's own exercise books. The dots in the number-pictures may be called ships blown by the wind across the sea, kites tossing in the sky, &c.

Story—THE FROG PRINCE

Once upon a time a beautiful Princess was playing with her ball beside a pond. It was not a ball such as the boys and girls play with now, but was made of gold; this was because she was a king's daughter. She threw the ball high in the air, then tried to catch it, but, to her dismay, it fell into the pond and sank out of sight. The Princess was so sorry to lose her ball, that she sat down on the edge of the pond and sobbed bitterly. "What are you crying for?" asked a rough, croaking voice. The Princess turned round; but she could see no one; so she began to sob again. "What is the matter?" the queer voice asked again. Then the Princess discovered that it was a large frog who was speaking to her. His two great bulging eyes looked so friendly, that she told him about her ball. "Oh, do not cry about a little thing like that," the frog said; "if you will give me the reward I ask, the ball shall be yours again." The Princess was so glad at the idea of getting her ball, that she promised the reward without really listening to what the frog was saying. He was telling her that if he got her golden ball she must let him come and live in the royal palace with her, and eat and drink from the same plate and cup.

"Yes, yes," she said; "be quick, be quick, and find my ball."

The frog jumped into the water and swam to the bottom. When he came to the top the Princess saw that he had her golden ball. She was so delighted to get it back, that without waiting to say "Thank you", she ran back to the royal palace.

"Wait a minute! Not so fast!" called the frog, who was trying to keep up with her. The Princess, however, did not hear him, but ran in high glee to her room. The frog followed as quickly as he could, but it was quite dinner-time when he arrived at the home of the beautiful Princess. He went straight to the dining-hall, and when the waiting-maid opened the door, he jumped in by the side of the Princess. "Oh!" she cried in a disgusted voice. "Go away! Go away!" But the frog said, "You must not forget your promise." The king, who heard this, asked what it all meant, so the Princess told him of the reward the frog wanted. "A promise is a promise," said the king; "and, if a king's daughter cannot keep her word, how can others be truthful?" The Princess, who was really a good girl, tried to hide her dislike, and allowed the frog to eat from her plate.

When the time came for the Princess to go to bed, the frog followed her to her room. She did not again tell him to go, for she was trying very hard to be true to her word. "Poor frog!" she said pityingly, "come in; my room will at least be warmer than a muddy pond." No sooner had she said this, than a wonderful change came over the frog. The Princess rubbed her eyes to see if she was dreaming, for there, where the frog had been, was a handsome young man. "Do not be afraid," he said. "I am really

a young Prince who was changed into a frog by a cruel witch. I was to remain a frog until some good maiden should take pity on me. You, dear Princess, have been kind to me, and to you I owe my change." He then told her of his love for her beauty and goodness. The Princess, who had straightway fallen in love, said "Yes" when the Prince asked her to marry him. As soon as the great wedding preparations could be made they were married, and, of course, lived happily ever after.

Another suitable story is "The Stork Family" Grimm.

Song—"FROGS"

—T. Keatley Moore's *Child's Song and Game Book*, Part IV.

Game—FATHER FROG AND HIS TADPOLES



2. My Tadpoles wriggle all the day. Ker-shog! ker-shog! ker-shog!
Very soon they'll learn to say Ker-shog! ker-shog! ker-shog!
3. Some day soon their tails will go. Ker-shog! ker-shog! ker-shog!
Then their legs begin to grow. Ker-shog! ker-shog! ker-shog!
4. Now you see us Froggies all. Ker-shog! ker-shog! ker-shog!
Jumping, swimming, great and small. Ker-shog! ker-shog! ker-shog!

Directions for Game. Verse 1. A bigger boy is chosen for Father Frog, and sits with knees bent and hands on floor in front. He sings verses 1 and 2.

Verse 2. The tadpoles—smaller children—wriggle round the pond, which is represented by a circle of children.

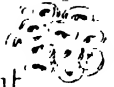
Verse 3. The pond children sing verse 3, whilst the tadpole children wriggle away.

Verse 4. Father Frog, and other frogs who have grown from the tadpoles which wriggled about, jump, swim, and dive backwards and forwards round the pond.

Blackboard Reading and Drawing



See these frog's eggs. They are like tiny dots of black inside balls of jelly. Soon the black specks grow longer, and become baby tadpoles. They eat the jelly,



and wriggle out for more food. What are these tadpoles doing? They are eating the water-weeds.



The tadpoles have gills so they can get the air out of the water.



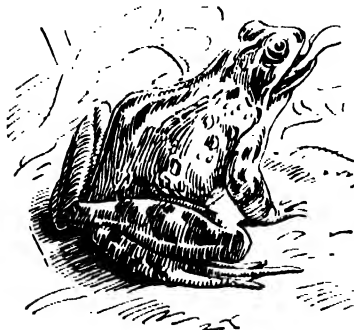
The tadpole seems all head and tail, until its legs begin to grow.

The hind legs come first; they will grow strong and long,



so that the frog can jump and leap a long way.

The gills have gone, and the front legs begin to grow. The tail gets shorter and shorter, till there is not any left.



The young frog has used it up for food.

"Kershog!" says Mr. Frog, "That fly looks good, I will have him for tea."

Frogs at School.



Twenty froggies went to school,
Down beside a rushy pool:
"We must be in time," they say.
"First we learn, and then
we play.

That is how we keep the rule,
When we froggies go to school."



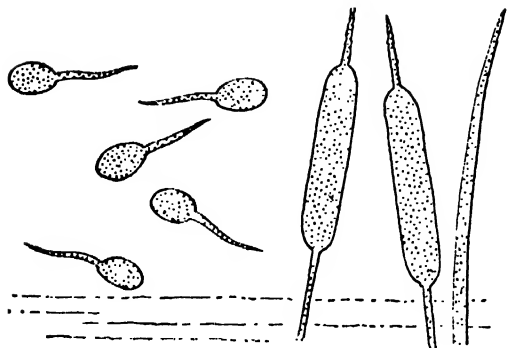
— Master Bull-frog, grave and stern,
Called the classes each in turn:
Taught them how to learn and strive,
Showed them how to leap and
dive.

From his seat, upon a log,
He taught them how to say, "Ker-shog!"
Also, how to dodge a blow
From the stones, that bad boys throw.

Twenty froggies grew up fast:
Big frogs they became at last:
Now they sit on other logs
Teaching other little frogs.



Paper Cutting—TADPOLES AND BULRUSHES

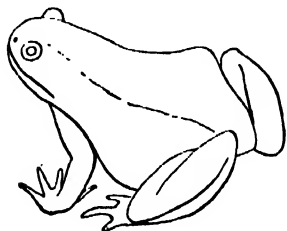


Tadpoles cut from black or brown paper; rushes brown. If these are pasted on a strip of paper, and water lines of blue painted, the effect is good.

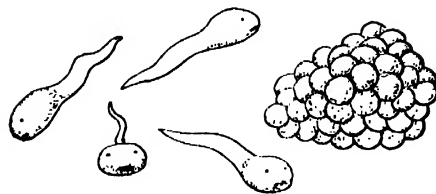
Paper Folding

Ground form of windmill. See coming lesson. This is rather difficult, and will need some practice.

Free-arm Drawing—FROG

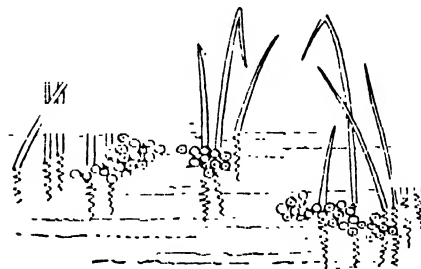


Clay Modelling—TADPOLES AND EGGS



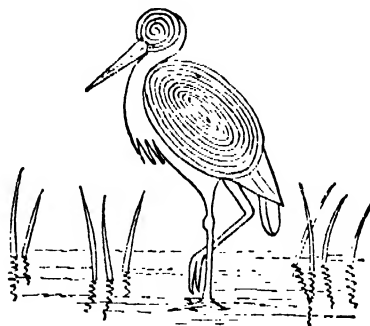
The eggs are made by rolling between tips of finger and thumb. Palm rolling not to be allowed. For tadpoles a larger ball is needed, and one end drawn out for tail. Mark eyes and mouth with picker.

Brush Work—FROG'S EGGS IN POND



Water, thin blue lines; grass, green; and eggs, dark brown.

Chalk Drawing FROG'S ENEMY



Water, blue; grass, green; stork, white; legs and beak, yellow.

Object Lesson—CLOUDS AND RAIN

PREPARATION.—The children will by this time have realized that spring has indeed come; seeds are growing; flowers are springing up; and the trees are putting on their new leaf dresses. What is helping this growing so much?—The spring weather with its warm breezes and soft spring rains, which, falling on the hard brown earth, cause it to soften, is the chief cause. The baby plants are stretching out their root fingers; and, feeling the earth moist, are beginning to grow. The rain falls in drops. Find from the children why this is better than one huge downpouring? Let the children describe the pattering raindrops.

PRESENTATION.—(a) **How the Water Gets up into the Air to make the Clouds.**—The teacher must boil some water over a spirit lamp, and get from the children the fact that it is turning into something which “looks like smoke”, and which, rising, mixes with the air of the room. Tell children that the sun acts on the waters of the earth in a similar way. Encourage the children to talk about ponds, rivers, and brooks which sometimes get dry. How is this?—The sun draws the water up in such tiny drops that we cannot see them, yet there are so many, that when they all get together great clouds are made. The heavier the clouds are, the more water vapour they contain and the darker they look. So dark some of them are, that they hide the rays of the sun. When a cloud hangs heavy and black, we know that rain is not far off.

(b) **Why it Falls in Drops of Rain.**—The teacher should again let the water boil, and when the vapour rises she should hold a cold slate or mirror over it. The vapour will condense and form drops of water on the slate. This is because the cold slate has chilled the particles of water vapour and

made them shrink and run together. When a cloud meets anything cold, e.g. a hillside, the vapour particles cling together and form drops which are too heavy to stay up overhead, and must splash down. A cold wind coming into contact with a cloud will chill it and cause rain showers. If there has been any hail within the children's recollection, the teacher can show how these drops of rain have been frozen before they could reach the earth.

(c) **Why the Rain is Needed Everywhere.**—The children will soon see that while the rain “falls on the umbrellas here”, it rains too “on the ships at sea”. Let children see the good of this. Show how countries would suffer if rain showers were not distributed freely. The “rain falls all around and on field and tree”, because the wind carries the clouds across the sky to water one place and then another. A hilly country is often a wet one. The children will be able to give a reason for this.

(d) **Uses of Rain.**—It cleanses the air from specks of dust and grime. It purifies the atmosphere of bad gases. In times of drought, fever and similar diseases are more prevalent than in wet seasons. The children will easily see that just as soap and water wash their hands and faces, so the raindrops cleanse the air.

The rain swills down the roads and streets. It cleans the gutters, and makes the pavements pleasant to walk upon.

It cleans the dust from leaves and plants, and thus helps them to breathe the pure fresh air. Many plants would choke if the dust were not washed away from their “mouths”.

The rain carries food and moisture to the roots of plants and trees. It softens the earth, and thus encourages plants to grow

Let children tell of the brave snowdrop which forced its way through the hard ground.

The falling showers fill the rivers, ponds, reservoirs, &c. They provide water for all purposes. Let children picture the condition of things in a time of famine—no water for domestic purposes, none for drinking; no water for the fishes, none for the farmer; no water for the engine-driver, none for the manufacturer; dry bareness everywhere.

ASSOCIATION. —

"But for fattening rain
We should have no flowers;
Never a leaf or bud again
But for soaking showers.
Never a mated bird
In the rocking tree-tops;
Never, indeed, a flock or herd
To graze upon the lea-crops.
Lambs so woolly white,
Sheep the sun-bright leas on,
They could have no grass to bite
But for rain in season.

We should find no moss
In the shadiest places,
Find no waving meadow-grass
Pied with broad white daisies;
But miles of barren sand,
With never a son or daughter,
Not a lily on the land
Or a lily on the water."

—Christina Rossetti.

FORMULATION.—The sun drinks the water up from the earth in such tiny drops, that they cannot be seen.

These very tiny drops form clouds. When the clouds get chilled the raindrops fall. Rain is good for all living things, men and animals as well as plants.

APPLICATION.—See "Kindergarten Occupations". Show, if possible, a coloured reproduction of "Stormy Weather", by Leopold Rivers, in National Gallery of British Art. Let children apply their knowledge and describe the scene.

Phonetics

PART I.—*The Sound "w"*. PART II.—*Exercises in Breath Control*

(i) "To-day we are going to talk about our old friend the wind. We will build his name on the word-building frame." Teacher pronounces the word "oo-ind", and asks for the component sounds. "You will easily remember 'w'" (pronounced "oo"), "because it is the first sound in 'wind', and, lengthened out, it is also the song the wind often sings." Teacher sings "oo-oo--", and children imitate her. Record of lesson:—Drawing of wind-tossed garments on clothes-line marked "wind".

(ii) The value of the following exercises lies in the fact that the children unconsciously inhale deeply before singing any of the wind's songs. "The wind has many songs; what are they?" Children tell how it roars,

whistles, buzzes, and shrieks. "Now we will sing some of its songs. How the wind whistles!" Lips are drawn back, and breath is passed gently through the teeth. "Hear the merry song of the wind." Teacher trills the sound "r" to the ascending and descending scales. Children imitate her. "It is roaring now as it tosses the clouds about the sky. 'Ooo' it roars with a loud blast. Then the blast gently quietsens down at last." Children sing loudly at first, but let their voices die away towards the end. "Now the wind is gentle. It lulls the bird babies to sleep and rocks their nest-cradles. 'M-m' it hums so sweetly and softly." Children hum and make rocking movement with their arms.

Number

Number 7 continued.

7 days = week.

Children say the days of the week, and then learn to print them.

Teacher makes an almanac for the current month when the lesson is taken. Suppose the lesson to be given in May, 1910. The almanac would be:—

Sunday	1	8	15	22	29
Monday	2	9	16	23	
Tuesday	3	10	17	24	
Wednesday ...	4	11	18	25	
Thursday ...	5	12	19	26	
Friday	6	13	20	27	
Saturday ...	7	14	21	28	

The children make an almanac for themselves. They mark any special day of the month—holidays, birthday, &c. Suppose the above calendar to be May Smith's, who has her birthday on 2 May. She will mark that date with a ring of red—a red-letter day for her. A black and purple ring round the 6th and 20th, for the death and funeral of King Edward VII, will be a means of commemorating those events. The days of Whitsuntide may all be marked if children have holidays. If not, Sunday and Monday only are marked with white—"white Sunday", &c.

Exercises are given on the almanac, such as:—What is the date to-day? Show me the 5th, Nell? Tom, come and point to next Tuesday's date. What is it? It is the 5th to-day. Who will show me a week on Wednesday? What date?

Story—THE RAINDROPS THAT WANTED TO BE OF SOME USE

Two drops of water once lived in the mighty ocean. Of course there were millions and millions of other drops besides, but these two were the special raindrops the story is about. "Ah!" said the first raindrop, "it is grand to live in the sea; but I feel so small and useless." "So do I," said the other. "We are so tiny, that we cannot be of any value at all." "Oh yes, we can," said the first raindrop. "Do you not remember those little children sailing in a boat over us and singing—

'Little drops of water,
Little grains of sand,
Make the mighty ocean
And the bounteous land?'

"That may be true," said the second raindrop; "but I am tired of tossing and tumbling, and pushing and playing with the

other raindrops. I want to be of some use. I want to work." "So do I," said the other; and then they were silent.

The strangest thing now happened. They felt themselves being drawn out of the ocean and carried higher and higher towards the sky. "Where can we be going?" they asked each other, as they went higher than ever. "Oh! what is to become of us?" they cried, as they went higher still. The great warm sun smiled on them and said: "Do not be afraid; it is I who have carried you here. You wanted to be of some use. I have work for you to do; so I took you from your ocean home." Then, when the drops were satisfied, he said: "Look down. Do you see that farmer below?" The drops of water looked, and saw a man who was shading his eyes from the sun and looking

up anxiously towards the cloud-carriage, where the two raindrops were riding with many others. Soon they heard him call sadly: "Ah, wife, there is to be no rain to-day; the cloud is passing. Ah me! the harvest will be poor this year; the land is parched and dry." The sun's face was hidden behind a cloud, but he spoke to the two raindrops: "You said you wanted to work; fall down now, and perhaps the others will follow you." Although it was such a dreadful way to drop, the two were not afraid, but toppled over their cloud-carriage, and "Pit! Pat!" down they fell.

The first splashed on the farmer's hand and then to the ground. "Ho, ho! wife," he shouted, "the rain is coming. I felt a drop on my hand." The second drop fell into the earth, lower and lower, until it came

to the root mouths of a drooping flower. The flower drank in the water thirstily, and stood upright once more. When the other raindrops saw their two playmates flying through the air to the ground, they thought the game seemed so nice that they wanted to play it too, so down they all fell. The happy farmer was delighted when they came, for he knew how much his plants needed this shower of raindrops.

"And that was the end of the two raindrops?" Oh dear, no! The great warm sun carried them back again to the clouds to do more work. "How did he carry them?" He drew them up with his warm breath; the first from the ground, and the second through the petals of a lovely flower. "Where are they now?" In another cloud-carriage waiting to do more work.

Song—"THE RIVER"

—Games from South Kensington (Curwen).

Game—THE RIVER

Smoothly

1. We'll
town, With ti - ny fish - es in down

2. Put a bridge across the river,
Where boys and girls may go,
And pretty boats a-floating,
Sailing down below.

Directions.—*Verse 1.* The river is made by two rows of children, who hold hands facing each other. A good distance between the two rows is required to allow space for fishes, boats, &c., to move about. The river-children glide along with a smooth motion. Boys and girls representing fishes swim between the rows, diving and rising at will.

Verse 2. A bridge is made of an opened barrel hoop held above the heads of the river-children, who glide underneath. Two boys, who face each other and sit on each other's feet, are the boats. By holding arms tightly they can move slowly and gracefully down the river.

Blackboard Reading and Drawing



"Each flower holds up a dainty cup" to drink the rain-drops. We must not get cross when it is wet. The rain is good for all. See the little daisies how they hang their heads. "Oh! we die! Give us rain," they say.

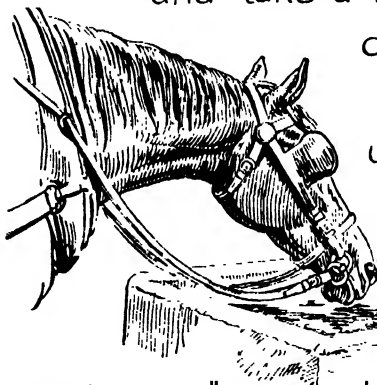


The grass is hard and dry until the rain makes it fresh and green.



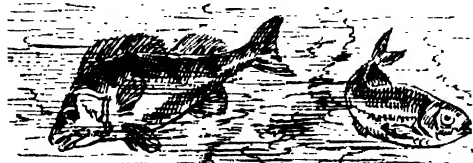
In the hot days, Mr. Dusty City-Sparrow likes to splash in the water and take a bath.

Old Jim Pull-Hard, the cab horse, says, "Hi-Ho! that's my water City-Sparrow ducks his head says, "The rain falls for tiny well as for big horses! The water is mine too."



cab horse, Mr. Dusty under and sparrows as

The water is mine too," says Mother. "How could I wash without the rain?" "The rain falls for me too," says the engine driver. "How could I make the engine go without water?"



"The rain showers are for me also," says the brook. "How could I feed my fishes without them?"

Spring Rain.



It isn't raining rain to me,
It's raining daffodils!
In ev'ry dimpling drop, I see
Wild flowers on the hills.

It isn't raining rain to me,
But fields of clover bloom,
Where any busy working bee
May find a bed and room.



Then let us all be happy
Ah, shame to him who frets!
It isn't raining rain to me.
It's raining violets!

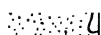


It's little thirsty mouths to fill,
It's buds and blossoms dear;
It isn't raining rain, or ill—
It's raining life and cheer.

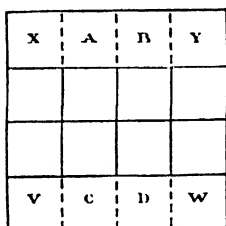
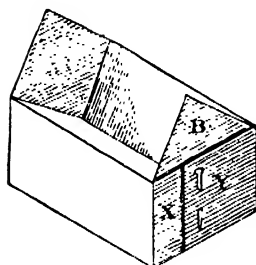
— Robert Loveman (slightly altered).

Other poems suitable for recitation:—"How Beautiful is the Rain!"—Longfellow. "The Cloud"—Shelley (select a portion). "The Fountain"—J. R. Lowell. "Rain"—R. L. Stevenson. "The Brook"—Tennyson. "Hiawatha's Rainbow"—Longfellow. "The Water Bloom"—Celia Thaxter in Book III of *Blackie's Model Readers*.

Paper Cutting—OPEN AND CLOSED UMBRELLAS

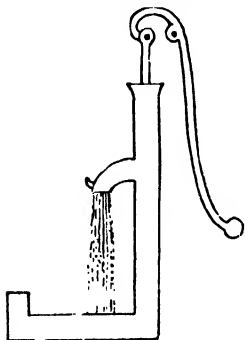


Paper Modelling—WATER TROUGH

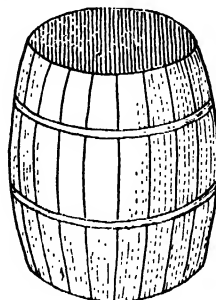


Fold into quarters as for a screen. Cut along dotted lines. Pin B behind A, and D behind C. These form points. When sides of trough are folded down, make ends of trough by pinning X and Y, and V and W, together.

Free-arm Drawing—PUMP

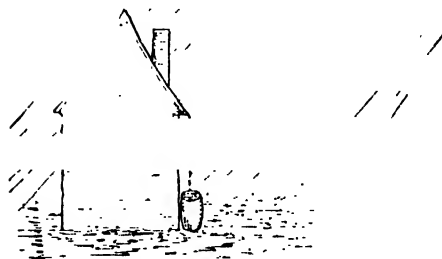


Clay Modelling—RAIN TUB



Steps:—Circle, cylinder, ends of cylinder narrowed, edges sharpened, markings made with pricker—garths round made first.

Brush Work—RAIN SCENE



House, brown madder; chimney, dark brown; rain and clouds, grey.

Chalk Drawing—GIRL IN RAIN



Outline of girl, white; umbrella and rain, grey.

Object Lesson—THE WIND

PREPARATION.—Last week the children saw how the wind carried the clouds across the sky and often caused showers of rain. The teacher might draw on blackboard a picture of men walking against the wind, or clothes being tossed on a line, birds blown about the sky or trees swaying in the wind. This will form a fitting introduction to the talk. If a windy day is chosen, the children can listen to the wind, and tell how they can hear it but not see it. What else is there that can be heard and not seen?—Thunder. Let children describe the different songs of the wind—the gusty note of the March wind, the gentle sound of the night breeze, the tearing shriek of the storm wind, and the stirring breath of the spring air.

PRESENTATION.—(i) **What the Wind is.**—If children cannot see the wind, yet they can feel it. The children are allowed to wave their hands about, and thus make a tiny breeze. They may need to be told they have made a little wind, i.e. they have made the air move. If a child waves a large sheet of cardboard about, the others can feel the air moving. Suppose the day is a windy one, the teacher can throw a sheet of paper out of the window. This will rise and fall, and twist and twirl, just as the air outside is moving, i.e. just as the wind blows it. If a paper is thrown in the room, it falls to the ground without much fluttering. Why is it not tossed about like the paper outside was?

(ii) **How to Tell when the Wind is Blowing.**—If possible, take the children outside and let them tell how they know the wind is blowing. The moving clouds, drifting smoke, twisting weathercock, little girls' waving curls, strings of bonnets, flying dust, and waving flag or flagpole are all indications. Each discovery is in itself fascinating if children are encouraged to observe keenly.

(iii) **How to Tell Direction of the Wind.**—This forms a good oral expression exercise. Such phrases as "from behind", "to our left", "from the south", "into the north", &c., are used by the children to denote direction. They will think it good fun to see how, by turning round, they will get the wind first in their faces, then to their backs. How could they tell direction of the wind without going outside? By means of weather vanes, banging doors, rattling windows, flying clouds, and bending trees.

(iv) **What Causes the Wind?**—When air gets warm it rises, and other cold air from surrounding parts flows along to take its place. Thus the air which gets warm is constantly moving, and colder air, too, is always in motion day and night. Sometimes the movement is so regular that it is not noticed, but often it is so violent that a mighty noise is heard.

(v) **Uses of the Wind.**—(a) The spring wind, soft and gentle, blows the dead leaves against the trees, where they lie and decay, and are turned into material to feed the roots. It cleans the earth and purifies the air. It blows the golden pollen from the "lambtail" catkins, and thus causes seeds to grow. It tells the flower seeds to begin their growing and the birds to begin their building. It brings soft showers to loosen the hard earth.

(b) The summer wind, soft and gentle too, blows the clouds in heaps and causes rain. By carrying the clouds it distributes the rain. The wind carries gases and impure air to plants which need them. It fills out the sails and drives the ships along.

(c) The autumn wind scatters the dead leaves from the trees and makes a blanket of them for the seeds and roots during the cold winter. It carries the dandelion


and thistle seeds in its arms. Refer to dandelion clocks which children "tell the time" by, by making puffs of wind with their mouths. It shakes the winged sycamore seeds from the branches, hazel nuts from the trees, and fruit from the boughs. Let children suggest other seeds scattered by the wind.

(d) The winter wind—rough and boisterous. It changes the raindrops into hailstones. It dries up the roads and lanes after a storm. It also turns the mill for the miller and grinds his corn.

ASSOCIATION.—Let children tell of the influence the wind has on the clouds and rain. Associate with lesson on dispersal of hazel catkin pollen by wind. (See previous lessons.)

FORMULATION.—The wind cleans the earth. It is moving air. It carries the clouds and

chills them, thus causing rain. It helps Mother Nature by scattering flower dust and seeds around. The wind is man's friend—it helps him to grow food and prepare it. It carries the ships across the seas.

APPLICATION.—Let children imitate the songs of the wind. These form excellent training in (a) voice control—O-o-o sung o-o  o-o, gradually increasing in loudness, then dying away; (b) breath control—M-m-m on a fixed note gives practice in regulating breath volume; (c) loosening of throat—A-a-a running down scale and up again quickly tends to loosen throat.

For further application see other correlated lessons following. If obtainable, show a coloured copy of "The Wind on the Wold", by G. H. Mason, A.R.A., National Gallery of British Art. Let the children talk about the scene freely.

Phonetics

PART I.—*Exercises in (a) Breathing and (b) Tone Control.* PART II.—*The Sound*

(i) (a) *1st Movement*.—Heels raise, arms thrust as far back as possible, palms facing to front, chest expanded; inhale through nostrils. *2nd Movement*.—Body slightly bent forward, arms cross low in front "as if to squeeze all air out of lungs"; exhale through open mouth. This exercise is repeated several times; the teacher insists upon hearing the breath "go in" and "come out".

(b) Children talk freely about the market-hall or church-tower clock, and the sound it makes as it strikes the hour. "Clan-g! Clan-g!" loud at first and then dying away to nothing. The children sing the "One-, two-, or three-o'clock song" of the clock. The steeple bell rings "Din-g! Don-g!" As children sing they imitate the pulling of the bell-rope. The impetus of the jerky

pull will give the necessary force to the beginning of the sound.

(ii) From the chat about "Cling, clang!" or "Ding, dong!" teacher leads to the sound "ng" at the end of the words. Children find its nasal nature by pinching their noses as they try to say the sound. They tell how the sound is made. The tongue and the soft palate meet until there seems to be no room for the breath to come through. It passes out down the nostrils. Children feel the warm breath on their hands.

Sentences for reading:—"Gling, clang!" rings the bell. "Time for work," it says. Reading and spelling, modelling and singing, we like them all. "Ding, dong!" sings the bell. "Time for play," it says. Running and jumping, skipping and hiding, we like them all.

Number

$$7 \div 1 = 7; 7 \div 2 = 3\frac{1}{2}; 3\frac{1}{2} \times 2 = 7.$$

General work on Number 7.

If possible, each child is provided with 7 cardboard pennies and at least two half-pennies.

By mean of questions, playing at shopping, &c., the children learn that 1*d.* can be taken away from 7*d.* 7 times. Therefore 1 of anything can be taken from 7 of the same kind 7 times. This is what $7 \div 1 = 7$ means. Teacher gives exercises on $7 \div 1$, and shows how much shorter and easier division is than subtraction.

Each child has 7*d.* Teacher tells class they are going to find the half of 7*d.* "All take 1*d.* from the 7*d.* How much left? Everyone knows the half of sixpence. How much? All divide your 6*d.* into two threepences. Now, what must we do with the odd penny?" Children see that to put it to one side or the other means inequality. They suggest dividing it in two. "But you cannot break a real penny. What then?

Change it?—Yes. All change that penny into 2 halfpence. Now divide the penny. You can all tell the half of 7*d.* now. You do not need to say 'threepence and a ha'penny'; say 'threepence ha'penny'."

Jack has $3\frac{1}{2}$ *d.*, but Ted has twice as much. How much has Ted? Children work it out with cardboard coins. Teacher prints $3\frac{1}{2}$ *d.* $\times 2 = 7$ *d.*

It rained every day for a week. How many days was that? Nan had to ride home on the car 7 times. She paid $\frac{1}{2}$ *d.* each time. How much altogether? Her father rode with her. He had to pay twice as much each time. How much had he to pay?

7 pints of water fell in the rain tub. Mother filled a pint jug from the tub. How often could she do that before the tub was empty?

Rob is a big boy. He cycles $3\frac{1}{2}$ miles to his work every morning. He cycles back at night. How many miles does he ride each day?

Story—HOW THE WIND SPENT A DAY

Early one morning when all was dark, just before the daybreak, the Father of the Winds lay sleeping on the hills. At length he roused himself and awoke from sleep. As he turned round to look at his wind children, it was like the rumbling of a mighty storm. When he spoke his voice was loud as the roaring sea. "Wake! my children," he said; "go to your work on this great earth. Purify it, and make the hearts of the people glad. Then at night, when you are weary, return to me and I will fold you to my bosom." So away went the winds with a rush and a roar to do their day's work.

"Whirr-r-r-r, whirr-r-r!" said one, as it

swept over the sea and cried to the sailors, "Awake! awake! It is the day! Sail on, the night is gone!" With a puff of its mighty breath it swelled the sails and sent the ships skimming over the waters. The sailors said: "The wind is rough, but he is our friend. What could we do without him?"

With a whizz-z-z and a whirr-r-r the Wind blew towards the land. "Ho, ho!" it cried, as it saw the children going to school; "now for good fun!" It pushed them and pulled them, and pulled them and pushed them, ruffling the little girls' curls and playing games with the little boys' caps. Oh, what fun it had snatching the hats and caps and

tossing them in the air! The children caught their breath and laughed: "Oh—oh—the wind—oh—is rough, but—oh—we love him!" Then the school bell rang, and the Wind carried the sound down the road. The little children went to their places and sang:

"Which way does the wind come?
Which way does he go?
He rides over the water
And over the snow.
But how he may come
Or whither he goes,
There's never a scholar in England that knows."

Was that the end of the Wind's frolic? Oh no! Bang, bang! went the schoolhouse door, and the windows rattled and shook. The teacher said: "The wind is rough to-day, but he makes the air sweet and pure. So blow away, Mr. Wind, you are our friend; we all love you."

Roaring on and on, the Wind went towards the forest. "You proud tall trees, I'll make you bend your haughty heads!" It cuffed them until they bowed and swayed. The little birds in the nests cried: "Cheep, cheep! dear Mother; who is rocking our cradles?"—"It is the Wind, my birdlings, the strong and mighty Wind." "Will he not blow us away?"—"Oh no! When birdlings learn to fly, and summer is over, he carries them in his arms far, far across the sea." "We are afraid; will he not blow us about the sky?"—"That will but make your wings stronger." "Mother, teach us to fly."

Gaily the Wind whisked away to the windmill. "Blow, blow," said the miller, "and turn my mill; its arms have long been standing still." So with a long and steady blow the Wind turned the arms of the mill round and round. The grindstone groaned: "Oh, now I must work—Mr. Wind is about, I hear, oh-h-h dear!" But the miller only rubbed his hands and said: "No more I'll

sing 'I care for nobody, no, not I, and nobody cares for me!' The Wind is my friend, for he makes my mill go. I care for him; he cares for me." The miller's wife saw the arms go round, and hung out her clothes, saying: "Good Wind, blow hard, and dry them soon." Then the Wind tossed them and twisted them so much that they would have flown away like white birds had not the pegs held them fast.

"Ho, ho!" cried the Wind, "where shall I go now? My day will soon be done." It scattered the smoke about the sky and sent the clouds scudding along. It turned the weathercock, until the squeaking made the people look up and say: "The wind blows east! No, west! No, north!" They could not tell which way the Wind blew, for the playful Wind scarcely knew itself. By and by the wind grew tired of play and sang its evening song. "M-m-m" it hummed round the home of a fisherman. In the cottage it saw the fisherman's wife with her babe on her knee, rocking it to sleep, as she sang:

"Sweet and low, sweet and low,
Wind of the western sea;
Low, low, breathe and blow,
Wind of the western sea.
Over the rolling waters go;
Come from the dying moon and blow,
Blow him again to me,
While my little one, while my pretty one sleeps."

So the Wind breathed in the sails of the fisherman's ship and carried it gently back to land again.

And now the night had come. The Wind stepped lightly on the dewy grass, rocked the birdlings to sleep, and then gathered itself together. With a drowsy "M-m-m" it flew upwards and upwards, back to the bosom of the Father of the Winds. Here it slept with the other wind children until another day should dawn.

Other stories:—1. "Wind, Sun, and the Traveller"—Æsop. "Story of the Wind"—Andersen (Adapted). 3. "Ulysses and the Winds."

Song—"I SAW YOU TOSS THE KITES ON HIGH"

—Songs for Little Children (Curwen).

Game—THE WIND THAT BLOWS IS BEST

on the cold North Wind, you know, the cold North Wind, you
bring cold winter's and snow, cold
ice and Cold North Wind,
our fa So
ho, blow, ho, ho!

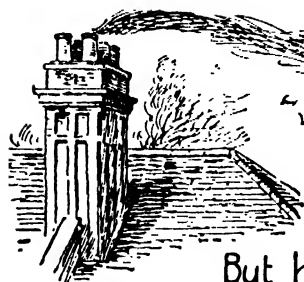
2. "I am the wind that brings the rain, the wind that brings the rain.
I thaw the frozen pond again, I thaw the ice again."
"Warm soft wind, we love you; you make the flowers grow.
So blow, ho, ho! So blow, ho, ho! So blow, ho, ho!"

Directions.—*Verse 1.* Several children representing the cold north wind run round the ring and, waving their arms, blow with their mouths. The other children pretend to shiver and, twirling their fingers, make imaginary snowflakes. They rub their cheeks, and hold out their hands as if welcoming the cold wind.

Verse 2. Cold wind goes moaning away, and the warm thaw wind comes in the ring gently and calmly. The ring-children kneel and hold up their faces as if they were flowers waiting for the rain. At the same time they make the pattering noise of the rain with their hands. Towards the end of the verse they all stand upright as if quite refreshed.

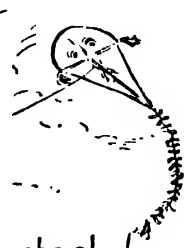
Blackboard Reading and Drawing

"Boo-oo! I am the Spring Wind. What fun I have!
I blow the smoke
about the sky,



and make the clouds scud along.

Tom Smith likes me; I
fly his kite.



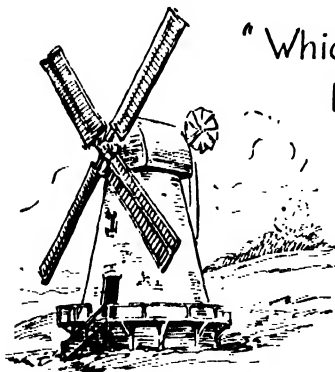
But his sister Nell
does not like me when I toss her curls and steal
her bonnet.



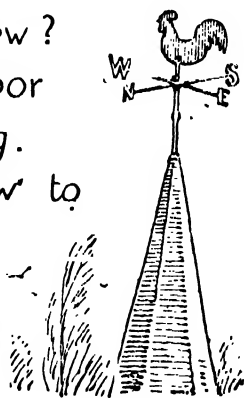
"Boo-oo! I am busy now;
I have all the clothes
to dry. It is
washing day.



Then I must turn Mr. ¹
Brown's mill and help to grind his corn.



"Which way am I blowing now?
Be quick and shut the door
or I shall make it bang.
Boo-oo! I must go now to
the sea and help the
sailors. How I love to fill
out the sails! Boo-oo."



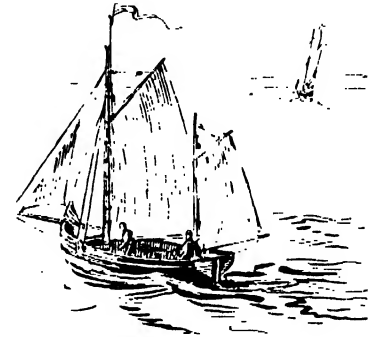
Daybreak.



A wind came up
out of the sea,
And said, "O mists,
make room for me."

It hailed the ships, and cried, "Sail on
Ye mariners, the night is gone."

And hurried landward far away
Crying, "Awake! it is the day."



It said unto the forest,
"Shout!
Hang all your leafy
banners out."

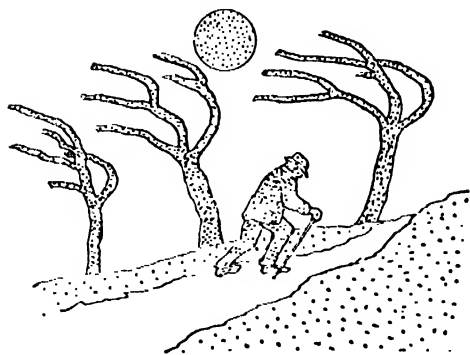
It touched the woodbird's
folded wing,
And said, "O bird, awake
and sing."



— Longfellow.

Other poems suitable for recitation:—1. "Windy Nights"—R. L. Stevenson. 2. "March"—Wordsworth. 3. "How the Wind Blows"—Book II, *Blackie's Model Readers*. 4. "The Wind in a Frolic" (to be read to children)—*Model Poetry Books for Infant School* (Blackie). 5. "The Wind"—Christina Rossetti. 6. "The Night Wind"—Eugene Field. 7. "The Sick Wind"—Hamish Hendry in *Red Apple and Silver Bells* (Blackie). 8. "The Wind and the Moon"—Geo. MacDonald. 9. "The Weathercock's Complaint"—*Century Reader 1* (Blackie).

Paper Cutting—WIND, SUN, AND TRAVELLER

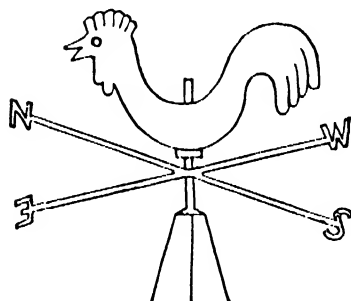


One portion of class makes the green hill, another the brown trees, and the remainder the traveller. The best specimens, if mounted, will form a long and effective border.

Clay Modelling—KITE

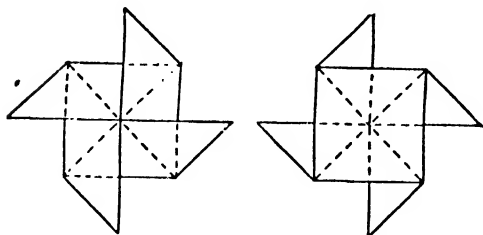


Brush Work—WEATHERCOCK



Weathercock, brown madder; tail, comb, points of compass, and church spire, Vandyke brown.

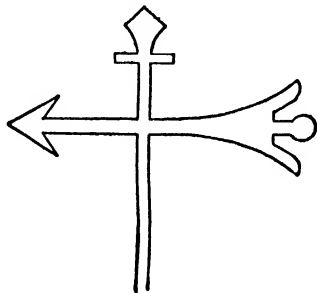
Paper Folding--WINDMILL



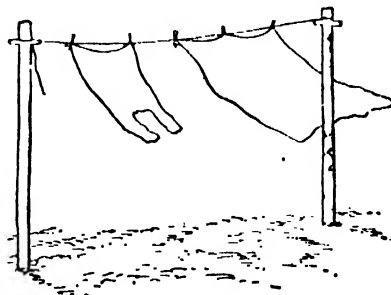
Front.

Back View.

Free-arm Drawing—WEATHER VANE



Chalk Drawing



Clothes and line, white; pegs and posts, red.

SUMMER PERIOD



'I hear the Echoes through the mountain throng,
The Winds come to me from the fields of sleep
And all the earth is gay;
Land and Sea
Give themselves up to jollity,
And with the heart of May
Doth every Beast keep holiday:

"Oh evil day! if I were sullen
While Earth herself is adorning,
This sweet May morning
And the children are pulling
On every side,
In a thousand valleys far and wide,
Fresh flowers; while the sun shines warm,
And the babe leaps up on his Mother's arm."

W. Wordsworth

Central Idea: “FULNESS OF LIFE”

GROWING TIME	{ How Seeds Grow. Lambkins and Sheep. Caterpillars.
PERFECT LIFE	(The Sun and his Work. Trees. The Dandelion. Buttercup. { Bees.
OFF FOR THE HOLIDAYS	{ In the Country. Cow and Horse. The Seaside. The Sea and Ships. The Train. { The Railway Station.

SUMMER PERIOD

Object Lesson—HOW SEEDS GROW

PREPARATION.—The chief value of this lesson lies in the fact that the children observe for themselves the actual development of the seeds. For about a fortnight or three weeks before the lesson they should set wheat, peas, or beans, according to the kind of seed chosen for that lesson. On several succeeding days new seeds should be planted in order to provide specimens representing different stages of growth. If a keen interest has been aroused during the development of these seeds, there will be no other preparation of the children's minds necessary.

Distribute dry beans to the class, and let the children express their ideas freely. Most of them will remember seeing mother shell beans for the dinner. They will describe the smooth, hard, shiny skin, and the mark on the edge of bean. What is this?

PRESENTATION.—(i) **What the Bean is.**—Provide each child with a bean which has been soaking some hours in water. It will be observed that the skin has become soft, wrinkled, and loose, and that the bean is larger than it was when dry. Allow children to remove the skin carefully with a pin. They will find:—1. A small projection of

one side of the bean. This is the beginning of the root. 2. The bean divides easily into two thick leaves. 3. Inside the two halves of bean is a tiny plant. 4. The plant has already two small folded leaves waiting to open out. These leaves are not green. Why? Compare young plant leaves seen in section of bulbs. The bean is a seed containing a young plant.

(ii) **Examination of Beans which have been Soaking Six or Seven Days.**—The coat bursts because the bean has swollen. Why has it swollen? The two halves begin to divide; these halves are the seed leaves. The root grows out, and afterwards a small shoot appears between the two thick leaves.

Work of the Seed Leaves.—These provide food for the tiny plants until the roots can get it from the earth and the leaves from the air. Compare "cupboard leaves" of the bulb, or inside of hen's egg.

(iii) **Stages of Development.**—Let the children examine specimens which have been planted two or three weeks.

(a) The small true leaves open slightly and begin to turn a deeper green. Why? The root grows stronger and sends slender

fingers out. The bean lies on its side until the stem is strong enough to support the two seed leaves in the air. These leaves are neither so big nor so heavy now. Why?

(b) The seed leaves are not shaped like the true leaves. They grow thinner and shrivel up. All the food has been taken out of them by the young plant. In time the brown, withered, seed leaves drop off—their work is done. The plant can now look after itself.

(c) A new bud appears between the two heart-shaped leaves at the top of the stem.

(iv) **How the Plant Lives.**—It eats, drinks, and breathes by means of its roots, stem, and leaves. Compare children's mouths. The roots, besides bringing food from the ground, hold the plant firmly in its place. The stem is like a pipe for carrying sap to the leaves and (afterwards) the flowers and fruit. The leaves eat and breathe by means of hundreds of minute mouths, which are mostly on the under side.

ASSOCIATION.—Compare the life of the young bean plant with that of the chicken (see Spring Scheme). If the teacher wishes she can associate equally well with bulbs or tadpoles.

1. The bean plant comes from a seed.—The chicken comes from an egg.

2. The bean seed is a storehouse full of food for the baby plant inside.—The egg is full of food for the chicken inside it.

3. The skin coat protects the bean plant.—The shell protects the growing chicken.

4. The bean plant does not grow all at once; one day it peeps above the ground.—The chicken, when ready, breaks the shell and steps out into the world.

5. The bean plant needs care, warmth, and water.—The chicken needs warmth and care, or it cannot be hatched.

6. In time the plant will blossom and

bear seeds like the one it grew from.—The chicken will grow into a hen and lay eggs like the one in which it was born.

FORMULATION.—The bean is a seed. It has a baby plant inside which needs caring for. The seed leaves are like a mother feeding and protecting her young until they are able to feed themselves. The roots grow first to find food for the stem and leaves. When the work of the seed leaves is done, they drop off. The bean plant needs air, warmth, and food.

APPLICATION.—Line a saucer with flannel, and let children plant mustard seed on it. They must see that the flannel is kept moist, and keep a record with chalk and brown paper of the stages of growth. The teacher might also fill a glass jar with water and tie some coarse flannel across the mouth. If peas or beans are put on this flannel they will, under ordinary conditions of warmth and moisture, push out their roots through the threads into the water below. In the writer's experience the babies' room not only had lovely pea flowers on a plant grown in this way, but a tiny pea pod made its appearance, to the keen delight of the little ones. The same year another teacher set linseed in the pores of a sponge, which was kept in the mouth of a glass jam jar full of water. The result was a cluster of slender green stems bearing beautiful blue flax flowers. Zinc trays filled with damp sawdust are admirable for nature observation. The blackboard drawings for this week were made from a plant growing under these conditions.

If wheat has formed the basis of the lesson, and corn has been planted by the children, the teacher can apply that portion of Longfellow's *Hiawatha*, beginning—

“Day by day did Hiawatha
Go to watch and watch beside it; . . .
Till at length a small green feather
From the earth shot slowly upward, . . .”

Phonetics

PART I.—*Breathing and Vowel Sound Exercises.* PART II.—*Long Vowels with Terminal "e".*

(i) The ascending scale -about C major - is played on the piano while children breathe in deeply. As the eighth note, or upper doh, is being struck, children sing a long sustained note to "a" (as in "came"). Teacher plays the descending scale while children inhale. When lower doh is reached they sing another even note to the same sound. The other long vowel sounds "e" (as in "these"), "i" (as in "like"), "o" (as in "hole"), and "u" (as in "blue") are treated similarly. Teacher varies the keys, but keeps them within easy range of the children's voices.

(ii) Teacher points to a word containing a long vowel sound and the terminal "e", e.g. "hole". Before the children have time to mispronounce it by giving it the short vowel sound, she says, "Stop! see what is at the end of the word. 'e' is a funny little fellow; he stands there saying nothing, but working all the time. 'What does he do?' He makes the short vowel before him into a

long vowel. That is, he makes this letter " (pointing to "o"), "say 'o' instead of 'o'" (pronounced as in "pot"). Children suggest colour of chalk to use for printing this silent letter "e". They may choose yellow, "like the softly falling leaves", or grey, "like the timid quiet mouse". Whenever the combination of the long vowel sound with terminal "e" occurs, this device of coloured chalk is used. In time children find it unnecessary. Teacher exercises children in the effect of the final "e" on the vowel in the following manner:—Print "bit" on board. Children say it. She adds "e"; children say it now. Prints "hat"; adds "e", &c.

Sentences for reading after the foregoing drill:—

"Pete, these are bean seeds. See the baby plants safe inside. I wonder how they came in their snug little homes! When it is fine they will wake and rise. They will make a hole in the sod. Kate will like to see the wind make their leaves shake."

Number

Number 8.

The figures and signs below show the various exercises that are taken. Each exercise is done by the children with actual objects, such as cowries and counters, before the figures are set down in the forms given below. The children draw all the number-pictures for the following exercises in their books of squared paper or on loose sheets. Small marks with brown crayon represent seeds well. A specimen question is given at the beginning of each series of exercises to show how the lesson is connected with the nature lesson.

(a) 7 red poppy seeds and 1 white poppy seed were set in a garden. How many seeds?

$$\begin{array}{rcl}
 7 + 1 & = & 8 \\
 8 - 1 & = & 7 \\
 1 + 7 & = & 8 \\
 8 - 7 & = & 1 \\
 5 + 3 & = & 8 \\
 8 - 3 & = & 5 \\
 8 - 5 & = & 3
 \end{array}$$

(b) Sarah had 3 plant pots. She planted 1 bean seed in the first, 2 in the second, and 5 in the third. How many altogether?

$$\begin{array}{rcl}
 1 + 2 + 5 & = & 8 \\
 2 + 5 + 1 & = & 8 \\
 5 + 1 + 2 & = & 8 \\
 5 + 2 + 1 & = & 8 \\
 2 + 1 + 5 & = & 8 \\
 1 + 5 + 2 & = & 8
 \end{array}$$

$$\begin{array}{rcl}
 6 + 2 & = & 8 \\
 8 - 2 & = & 6 \\
 2 + 6 & = & 8 \\
 8 - 6 & = & 2 \\
 4 + 4 & = & 8 \\
 8 - 4 & = & 4
 \end{array}$$

(c) Mr. Brown let 8 seeds fall on the garden path. A bird flew away with 1 in its beak. How often could it do that?

$$8 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 = 0$$

$$8 \div 1 = 8$$

$$1 \times 8 = 8$$

$$8 \times 1 = 8$$

(d) Jack Kay had 8 peas. He shot them,

2 at a time, out of his peashooter. How many shots had he?

$$8 - 2 - 2 - 2 - 2 = 0$$

$$8 \div 2 = 4$$

$$2 \times 4 = 8$$

$$8 - 4 - 4 = 0$$

$$8 \div 4 = 2$$

$$4 \times 2 = 8$$

Story--WHAT IS THE USE OF GROWING?

I once was a tiny seed. For a long time I slept in the dark earth; perhaps I should never have wakened had not a little voice said, "Grow towards the light, grow towards the light." My coat was so tight and warm, and my brown bed so cosy, that I wished to stay as I was for ever. Why should I climb upwards towards the sunshine when Mother Earth was keeping me so snug? "What is the use of growing? It is far better to sleep and rest," I said. I felt something stir inside me, and the voice said again, "Grow towards the light; sleeping time is over; work and grow." I began to feel so strong, that soon I burst through my tight coat and put out my sprout hands. How I worked my way through the earth! My roots crept down, down, and my shoot fingers climbed up, up. At last I reached the light and saw the beautiful world. I opened my petals and found I was a pale yellow primrose. Ah! growing was of some use after all.

There were many other primroses growing with me, so I was not at all lonely. Indeed, we had some merry times together. We played at hide-and-seek with the sunbeams all day, and at night the moon smiled kindly down on us. The little stars whispered in our dreams and called us "star babies". Alas, those happy times came to an end, for one morning we heard a voice say, "Primroses? Yes; take as many as

you please." Before we had time to send a message to the stars, or even say good-bye to the sunbeams, our slender stems were snipped, and we were tossed into a basket.

How long I lay in the basket I do not know. It was lucky I was on the top, or I should have died. I am sure I must have fallen asleep, for when I awoke I found myself tied in a bunch with some of the other primroses. Where was I? Instead of the fresh green fields, there were rows of great black buildings; instead of the song of the birds, there was the din of the street cars; and instead of the hum of the bees, there was a rattle like thunder from the cabs and carts. I was in a flower-seller's basket! I thought of my cool, shady home and bent my head to cry. This was unfortunate, for the flower-seller, thinking I was withering, picked up the bunch I was in and shook us so hard that our heads nearly danced off. "Sweet primroses!" he cried. "Penny a bunch, lady," and we were bought by a sweet-faced woman who was passing by.

I think I must have fainted then, I was so thirsty, and the hot sun had scorched my poor aching head. When I revived I found myself standing with the others in a bowl of clear cool water. I had not tasted water since those dreadful scissors cut my stem, so you may be sure I drank very gladly. Soon I was strong enough to lift

up my head and look around. I was in a bright room which had a row of tiny white beds down each side. "This, at least, is better than the dusty streets," I said to myself; but just then I heard a low cry of pain from one of the beds. I knew that I was in a hospital ward.

"Nurse," a weak voice said, "shall I never walk again? Shall I *never* run in the fields and see the sweet primroses again?"

and the small voice ended in a sob. The little sufferer turned his head on the pillow and caught sight of me standing there. He gave a cry of joy and clapped his tiny hands together. Then, when the nurse put me in his hand, he kissed my yellow petals again and again, and pressed my pale face against his own white cheeks.

I knew then what was the use of growing.

Other stories: 1. "Five Peas in a Pod"—Hans Andersen. 2. "Jack and the Beanstalk". 3. "The Straw, the Coal, and the Bean"—Grimm. 4. "Apple-seed John" *Blackie's Model Readers*, Book 1. 5.

Songs --1. "IF I WERE BUT A SEED"

—*Practical Teacher*, July, 1907.

2. "WE PLOUGH THE FIELDS AND SCATTER THE GOOD SEED ON THE LAND"

To be found in almost any Hymnal.

Game --THE GROWING SEEDS

1. We are seeds far out of sight, In dark homes 't is I - ways night; But

far a - bove shines the sun, We'll umb to him,

2. Drinking in the soft spring rain,
Ah! fast asleep too long we've lain;
Our eager fingers stretching out -
Hurrah, at last we look about!





3. Lovely world, if we'd but known
You were half so fair, we would have grown,
And hurried on our fresh green dress,
To feel the sunshine's soft caress.


Directions.—*Verse 1.* The seed children huddled together, crouch on the ground with eyes shut and heads bent. At words "shines the sun" they hold faces up, but still with eyes closed, as if in search of the light.

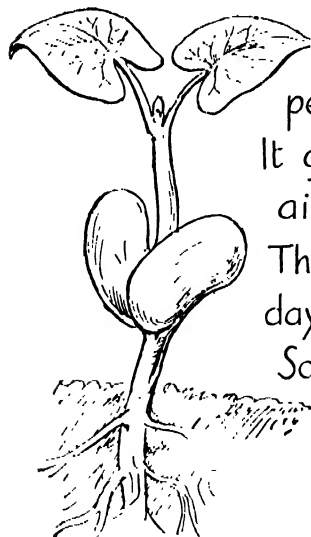
Verse 2. The rain children make the pattering sound of rain with their fingers, whilst the seed children open and close their mouths as if drinking. Fingers, hands, and arms stretch about, until at last, standing on tiptoe, the sprouting plant children gaze eagerly around.

Verse 3. All stand in attitudes representing different flowers, e.g. one child hangs head for bluebell, another holds up face for daisy. The rain children substitute the third personal pronoun for the first. For example: "Lovely world, if they'd but known . . . they would have grown," &c.

Blackboard Reading and Drawing

"Only a bean  to eat! I am more than that, I am a seed waiting  to grow. Please, take off my shell. Can you see the tiny root  ready to sprout? Open my two thick leaves and see the baby plant inside. Put me in soil then you will not say, 'Only a  bean to eat!'

We have a bean plant growing in our classroom. We set it  in damp sawdust. At first the shell split. the bean grew so big. Then a tiny root began to grow. It wanted to find food for the hungry little plant. The food in the two thick leaves was getting done.



Next, a tiny green shoot peeped between the two thick leaves. It grew so strong that it lifted its head in the air, and held up the seed leaves too. These leaves grew thinner and thinner, until, one day, they fell off. Their work was done. Some day a pretty bean flower will grow. When it dies, a bean pod may come in its place. Do you know the story of Jack and the Beanstalk?

The Seed Child. (Flax Flower)

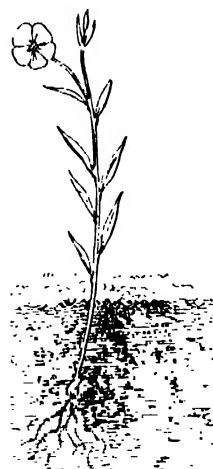


Two little seed-children, huddled together
Down in the dark earth below,
Began to be restless and then wonder whether
It was time to begin to grow.

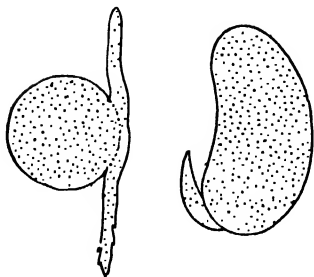
Said one, "I will put out my rootlets
this minute,
And you do the same, little brother."
"This pushing and growing - I see
nothing in it,
I mean to stay here", said the other.



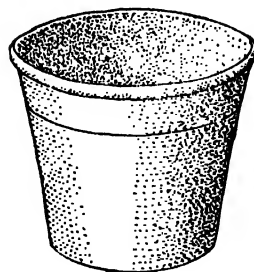
Groping and climbing
each minute, each hour,
The seed-child at last
showed her head.
There, kissed by the sunshine -
a pretty blue flower -
"I'm glad that I hurried,"
she said.



Other poems suitable for recitation:—1. "Baby Seed Song"—E. Nesbit, in Book I of *Blackie's Model Readers*. 2. "Asleep"—George Mac Donald, in Book II of *Blackie's Model Readers*. 3. "Sow, Sew, and So"—Rosa Graham (use verse 1). 4. "'Little by Little' an Acorn Said." 5. "Waiting to Grow" *Recitations for the Infant School*, by M. Riach (Blackie).

Paper Cutting—BEANS AND PEAS

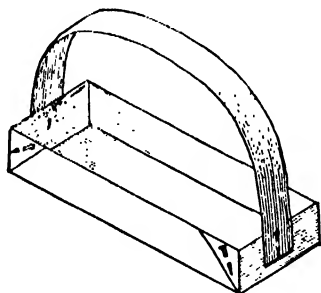
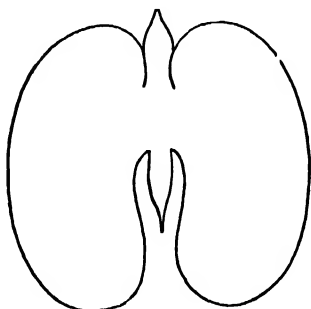
These may be cut in white paper and coloured during the brush-work lesson. They should be copied from actual specimens.

Clay Modelling—PLANT POT

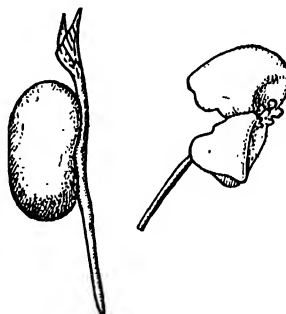
The steps for the modelling of plant pot are: - Circle, cylinder, one end of cylinder narrowed, rim round top worked into shape, ring round pot made with side of prickler or pin.

Paper Folding - BOX FOR SEEDS

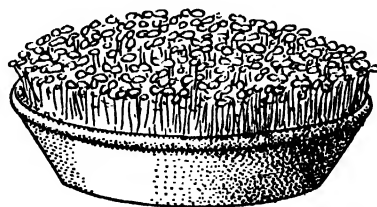
(See Spring Scheme -Box for Crocuses) or Basket for Flowers.

**Free-arm Drawing—BEAN SEED-LEAVES (OPEN)**

This is an excellent exercise for ambidexterity.

Brush Work—SPROUTING BEAN OR BEAN FLOWER

Colours: -Bean, vandyke brown with a little green mixed; plant, leaves green; sprouting root, yellow; bean flower, brown madder mixed with a little scarlet.

Chalk Drawing—MUSTARD SEEDS GROWING

If there are none of these seeds growing in the classroom, the children must draw beans or peas growing on flannel.

Object Lesson—LAMBKINS AND SHEEP

If possible, the apparatus should include model of a sheep or lamb, some wool, a pair of shears, a picture of sheep washing and shearing. A coloured reproduction of "Sheep Washing in Sussex", painted by J. Aumonier, R.I., and now in the National Gallery of British Art, would be an excellent illustration. Blackboard drawing of sheep resting in meadows with their young skipping about them should be before the class.

PREPARATION.—The cold winter winds are nearly over and gone, and the sun is nearing his full strength. The earth is responding to the "growing weather" the children heard about last week, and the grass is growing fresh and green. Mother Nature is ready to receive the young of every kind. The birdlings are enjoying the warmth and beauty of this time of the year. They are not the only "children" of the open air. "May brings flocks of pretty lambs, skipping by their fleecy dams." Children can repeat this and give their own ideas as to its meaning. Explain "fleecy" and "dams". Why were not the lambs born at Christmas? Then they would have died of cold and possibly starvation. Now the air is warm and kind, it does not matter that they have to stay out all day and night. Now the grass is tender and green, and gives rich meals to the mother sheep, so that she in turn may nourish her young.

PRESENTATION.—(i) **Appearance.**—Let the children describe a tiny lamb they have seen and compare its size with that of the ewe. The children will have noticed its pretty face with eyes timid and startled. Its long legs are still shaky and weak, and its wool is short and soft. Compare the down on the chicken's body, and contrast the lambkin's coat with the sheep's thick fleece.

The sheep's foot is shaped like that of the

cow. It has four toes, but the two back ones are never used; they are too high on the leg. The two large toes in front are covered with a horny case. The whole hoof seems to be split or cleft in two, and so is called "cloven". Make a chalk drawing of the hoof, and ask children why the foot of the sheep is not soft and tender like ours.

(ii) **Habits.**—The young lamb is easily frightened, and will run to its mother if even a child attempts to touch it. The ewe is very timid where her young are not concerned, and will not willingly come near any person.

The sheep sleeps outside all night and in all kinds of weather with her young by her side. Compare the chickens which sleep under their mother's wing. Sometimes during violent storms the sheep are put into a pen. A copy of such a picture as Joseph Farquharson's "The Joyless Winter Day" will describe better than any words the desolate days the sheep often have to endure. This picture, which is in the National Gallery of British Art, depicts a flock of sheep in the drifting snow. Their faithful shepherd, with his two dogs, stands shivering in the rude shelter afforded by a low snow-covered wall which scarcely breaks the force of the blizzard.

The sheep chews cud. Get the children to describe the way in which the sheep eats. It breaks off the grass with its lower front teeth and upper lip. This grass is swallowed and, without waiting, the sheep swallows more and more. After a time it lies down; the children might think the sheep is resting, but this is not so. If they have watched the sheep's mouth they will have seen it move. The grass the sheep swallowed was only swallowed and not eaten. The sheep did not chew it at all, but dropped it into a stomach called a

paunch. When this paunch is full, in some wonderful way some of the grass comes back into the mouth to be chewed. The sheep uses its back teeth for this purpose. Compare the different use of children's back and front teeth. Show a chalk drawing of the side view of a sheep's teeth. When the grass is chewed it is ready to be swallowed finally. Contrast the different way in which children eat their food from that of the sheep. The former chew the food before they swallow it; the latter swallows and afterwards chews its food.

The sheep loves her young. Let children tell how, when the old ewe calls "Baa", the little ones run to her. She feeds them during the day and keeps them warm at night. The young lamb does not need the same care as a baby. It soon learns to walk; a lamb two hours old can stand alone, and in as many days it is quite playful and frisky.

(iii) **Wool.**—Children cannot have failed to see the difference between the curly rings of soft white lamb's wool and the dark, heavy-looking masses on the sheep's back. What is the use of this wool to the sheep? Remind the children of the cold winter, and of thick overcoats and gloves they wore then. The sheep needs a warm covering even more than the children do, for they have a cosy home to shelter them.

When spring comes this coat is not necessary. In the warmer days of May and June the coat is too warm, and, because the sheep cannot unbutton it as the boys do their jackets, the wool begins to get loose and fall off. Then is the time for shearing.

The sheep must first be washed in a stream. Their fleeces have grown begrimed and soiled through sleeping out of doors during all kinds of weather and lying on the ground, which is often soft and muddy. When the sheep has been washed it is sent to run about the fields till the sun dries its coat. The shearing then takes place. The shears, a huge pair of scissors, cut the wool off quite close to the sheep's body. Show a pair of shears or make a blackboard drawing of them. Lest any child should think this shearing is painful, compare the process with the cutting of child's own hair.

Besides relieving the sheep, the wool is useful to us. Blankets, coats, gloves, socks, and all kinds of clothing are made. Why is wool specially good?

ASSOCIATION.—Compare the kindness of the shepherd with that of our Heavenly Father. Also compare the love and care of the ewe with the love of children's own mother. In towns connected with the woollen industry the lesson can be made very near and real to the children.

FORMULATION.—The sheep and her lambs are very timid.

The sheep's foot is cloven.

The sheep chews cud.

The sheep loves her young.

The wool of the sheep is useful in the winter for warmth. In the summer it is cut off and made into many useful things.

APPLICATION.—Let children learn Psalm xxiii. For further application see "Kindergarten Occupations" and "Blackboard Drawings".

Phonetics

PART I.—*Production of Long Vowel Sounds.* PART II.—*Double Vowels.*

(i) The mouth is opened sufficiently to allow the insertion of two fingers one above the other, the lips are rounded and slightly

protruded, and the vowel sound of "oo", as in "boon", is sung to the successive notes of the downward scale, beginning with D on

the fourth line of the stave. Each note is continued while the teacher counts from four to eight slow beats, breath being taken at first after each note, then only after the fourth note of the scale, until the children are capable of singing the whole scale of eight notes with one breath. The other vowel sounds are practised in turn.¹ Children place finger in mouth while the various sounds are being produced, and tell that the space between the tongue and roof of mouth alters. Teacher takes care to get the sounds well forward in the mouth, and corrects any throaty or hard beginnings of vowels.

(ii) "Last week you learned one way of changing a short vowel into a long one. Nell, come and change 'kit' into 'kite'.

Right. Here is another way. You see this word 'met'. I will change it into 'meet'. Close eyes." Teacher puts a second "e" on word-building frame. "Open eyes. What have I done? Sam, come and change 'met' into 'meet'. Now see me change 'rod' into 'rood'. Joe, print 'tot'. Now change it into 'toot'. Ted, print 'fed'. Change it into 'feed'."

Sentences for reading after word-building drill: I am a sheep. I like green grass. Do you see my baby? It cries "Baa, baa!" Its teeth will grow. Soon it will eat the green shoots. That pool is cool. Look at the sheep-dog. He is not asleep. He is peeping at us. There is room for all the sheep.

Number

Number 8 continued.

The meaning of half, quarter, eighth.

Each child is provided with a lead pencil, a pair of kindergarten scissors, and a circle of paper such as is used in circular paper-folding.

Children will have learned the meaning of "half" already in lesson on number 2, and "quarter" in lesson on 4; but teacher starts from beginning as if nothing had been learned. Revision is good, and "half" and "quarter" are a necessary introduction to "eighth". Not only does the teacher go through the folding with children, but she divides an orange at each step.

Children fold paper in two, crease, and open. They draw a pencil line along the crease and tell of two equal parts. Each part is called one-half. Teacher prints $\frac{1}{2}$ on board and tells children that the 2 under the line means 2 equal parts. She cuts her orange in two, and children repeat "2 halves of an orange make a whole one".

Children fold paper back in halves. They

fold the halves in two and crease. Open and draw pencil line along new crease. There are now four equal divisions. Each part is called one-fourth or one-quarter. Teacher prints $\frac{1}{4}$ on board, and asks what 4 under the line means. She then cuts half an orange in 2. Children tell that $\frac{1}{4}$ is $\frac{1}{2}$ of one-half. Teacher prints $\frac{1}{4} = \frac{1}{2}$ on board, and children say what it means.

They next fold the papers into quadrants again. These quarter circles are folded in half, creased, and opened. Children tell they have now got smaller divisions than ever. The new divisions are just half the size of the quarters. There are now 8 equal parts. These parts are called eighths.

$$8 \text{ eighths} = 1 \text{ whole}$$

$$1 \text{ eighth} = \frac{1}{2} \text{ of } \frac{1}{4}.$$

Children put these statements into words before teacher prints them on board.

Children cut papers into halves, quarters, and eighths. They make up such quantities as $\frac{3}{4}$, $\frac{1}{2}$, $\frac{5}{8}$ as teacher desires, by placing cut eighths together.

¹ "Articulation" in *Blackie's Model Reader I*.

Story—THE MOON'S LAMBKINS

One summer night, when all the flowers had folded their leaves and gone to sleep, and the little birds had tucked their heads away under their wings, a mother sheep and her lamb were lying asleep in a meadow. The ewe was asleep, but the lambkin was not. How could she sleep when the great round Moon was staring down at her! "Mother," said the lambkin, "who is that with the pale face up there ever so far away?"—"My child," said the mother, "that is the White Moon Shepherdess; go to sleep." But the lambkin could not. "Mother, why does the Moon not sleep? Is she sad?"—"My little one, I do not know; but this I know, that night is the time for little lambs to sleep." The mother sheep turned and slept, but the lambkin could not. It seemed so lonely away up there, and the Moon looked so pale and sad. The little lamb turned to its mother again: "Dear Mother, has the Lady Moon no children?"—"Why, yes! You see those tiny faces all around her? They are her lambkins; now sleep, my child." Once more the mother turned and slept, but still the little one could not. The Moon seemed to say, "Little lamb, I am so lonely, come to me," and the stars seemed to say, "Little lamb, we are the Moon's fleecy lambkins; we are sad too," and they shut their tiny eyes as if to blink their tears away.

The lamb stood up and looked round the dark meadow. "Ah, now," it said, "whilst my mother is asleep I will go to the Moon." Poor lambkin, it did not know that the Moon lived so many, many miles away! Across the meadow it went towards the gate, but that was locked. "Of course, the Farmer shut us in," said the lambkin. "I must find a gap in the hedge." It found one at last and climbed through. How the thorns tore its wool and scratched its face! But the

lamb went bravely through and down the dark lane. It walked on and on until it was too tired to walk any farther, and yet the pale silver Moon was as far away as ever. "I do not think I shall ever reach the moon," said the wee lambkin; "my legs are too weary to walk any more, I must rest." Almost before the last word was spoken, the lamb sank down on the road and was fast asleep.

Now, a wonderful dream came to the lambkin as it lay there. The pale Shepherdess Moon stepped out from her place and came down to speak to it. Her star lambkins followed behind in hundreds and hundreds. They rolled and tumbled, and sparkled and twinkled, as they fell over each other in their hurry. "Why are you not in the meadow with your mother?" the pale Moon asked. "I came to find you—you seemed so sad," the lamb answered. "Sad! Nay, little lamb, I have no need for sorrow; I could not be so bright if I were not happy. Am I not God's lamp hanging in the sky to guide men's feet in the night? I am too busy to be sad." "But I thought your star children were crying."—"What, my sparkling, lambkin stars unhappy! Nay, they, too, have no time for tears. Their tiny lamps cheer the lonely traveller and the suffering child who cannot sleep." "Still, I thought I saw them weep."—"They were only closing their eyes for a moment so they might shine more brightly still." While the Shepherdess Moon was speaking her golden star lambkins were having great fun in the road. They found some sleeping dandelions and called them "star flowers". They twinkled in amongst the buttercups and made them open their petals, thinking the morning had come. They sparkled among the grass and pretended to be night flowers, and they were having the jolliest game of hide-and-seek when the Silver

Moon called them together. "Come, my fleecy lambkins, back with me, we have stayed too long already," and away they all sailed back to the sky again.

"Oh, here you are!" cried the loud voice of the Farmer, who had been taking a last look round the meadow and had missed the

lambkin. He picked the little wanderer up and carried it back to its meadow home. When it awoke in the morning there was no Silver Lady Moon to be seen, and every single star child had disappeared; but the lambkin remembered its dream and told it to the old ewe.

Other stories suitable are: 1. "The Boy who Cried 'Wolf'"—Æsop. 2. "The Good Shepherd"—Bible. 3. "Story of the Golden Fleece" (adapted)—Kingsley's *Heroes*, "Blackie's School and Home Library".

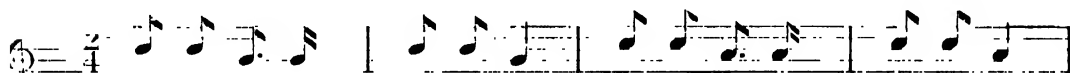
Songs—1. "WHO OWNS THE FLEECIEST LAMBKINS?"

—*Song Garden for Children*—Edw. Arnold.

2. "LOVING SHEPHERD OF THY SHEEP"

—*Ancient and Modern Hymn Book*.

Game—FARMER BROWN'S SHEEP



1. Far ones this way, Walk - ing by him old dog Tray;
2. One old black she tries to roam, Good dog Tray soon drives him home;



In field he drives the sheep, And dog Tray safe watch to keep,
Far takes them one by one, Now to the wash-ing stream they're gone.

3. See, their wool is clean and white!
Is it not a pretty sight?
Then the farmer brings his shears --
The little sheep need have no fears.

4. Little by little he cuts the wool;
Soon the bags will all be full,
When the sacks will hold no more
The sheep run back—one, two, three, four.

Directions.—*Verse 1.* A large boy as the farmer, helped by a smaller boy as the dog Tray, drives the sheep into the meadow, which is marked by a chalk line.

Verse 2. One sheep tries to jump the hedge (chalk line), but is driven back by the dog. Farmer takes sheep across to the stream, marked by another chalk line.

Verse 3. After dipping the sheep in the stream, the farmer pretends to get his shears.

Verse 4. He dramatizes the cutting of the wool, himself seated with the "sheep" between his knees, and pretends to put the wool in an imaginary bag held by another child. As each "sheep" is finished with, it skips back with glee to the meadow.

Another suitable game can be made from "Eight White Sheep", a recitation in *Recitations for Infant Schools*, compiled by Margaret Riach (Blackie). To simplify the same, have four sheep instead of eight and one watchdog instead of two, e.g.

"These are four white sheep all fast asleep,
And one old dog close by;
All through the night his watch is bright,
For fear a wolf comes nigh".

Blackboard Reading and Drawing



"Good-day! Can you say, 'May brings flocks of pretty lambs, skipping by their fleecy dams'? See my curly coat. When I grow older, it will get too warm. The kind farmer will then cut it. 'Will it hurt?' Oh dear, no! Mother says I will not feel it. These are the scissors he will use. They are called shears. First I must have a dip in the stream to get my coat clean.

"Don't you think you would need a wash, if you stayed out every day, and all the nights? How many toes have you? I have four on each foot, and I only use two of them. The two front ones are covered all round with a hard nail; yours are not.



"Here is my mother.

How I love her! When danger is near, she calls, 'Baa, baa!' Then I run to her side. My mother has had her dinner and is chewing it up.



The red cows in the next field bite the grass off, and chew it after, just as my mother does. Is your mother kind? Mine is. She finds me places where the grass grows tender and sweet.

"There is my playmate. Good-bye! When I have a thick coat you shall have some wool for a scarf."

Summer Play.



A sunbeam hid in the bright blue sky.
"Shine out!" said the sun, "Shine out!"
So it shone on a lambkin standing by;
"Frisk about! little lamb, frisk about!"

The lambkin said to the golden beam,
"Let us play! shiny thing, let us play!"

So the sunbeam shone in a dazzling stream,
"What a day!" said the flowers, "What a day!"



They played 'hide-and-seek', till the day was done:

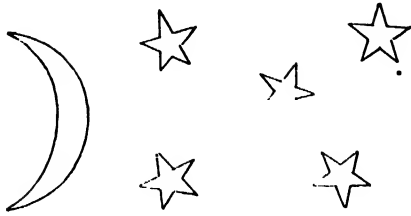
"Good-night!" said the beam, "Good-night!"

The lambkins and flowers have shared in the fun."

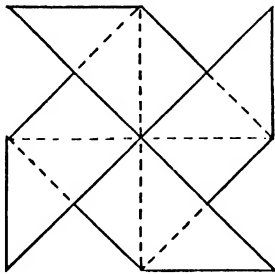
"Quite right!" said the sun, "Quite right!"

M.B.

Other poems suitable for recitation:—"The Lamb"—Wm. Blake in *Model Poetry Book for Infants*.
"Sleep, Baby, Sleep", "Spring Morning" in *Blackie's Model Poetry Book*. "Seven Times One"—Jean
Ingeiow.

Paper Cutting—MOON AND STARS

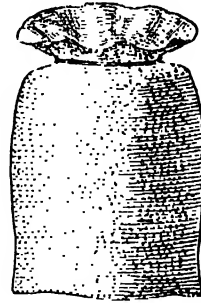
See story, "The Moon and her Lambkins". These should be cut out in yellow and mounted on dark grey paper.

Paper Folding ONE OF THE MOON'S LAMBKINS—A STAR

This is really the windmill ground form, but as this is a form much used in paper-folding, the extra practice will be useful.

Free-arm Drawing SHEARS

With both hands.

Clay Modelling—ONE OF THE BLACK SHEEP'S THREE BAGS OF WOOL

Make a sphere, then a rough cylinder. Work out top of sack with finger and thumb of right hand. Pinch and twist to give the top the correct appearance. Tie round the neck with thread for string, or mark with pin point.

Brush Drawing LAMB'S FOOT

The leg pale yellow and hoof vandyke brown.

Chalk Drawing SCENE OF THE STORY

Sky, grey or dark blue; moon and stars, pale yellow; and hedge and grass, dark green.

Object Lesson—CATERPILLARS

Material required for illustration:—Specimens of various butterflies, chrysalides, caterpillars, and butterflies' eggs.

PREPARATION.—Prepare for this lesson two or three weeks before it has to be given. Decide upon a special kind of caterpillar for the lesson, e.g. the cabbage caterpillar. Tell the children to look out for the eggs and grubs of the cabbage butterfly, which are to be found on cabbage leaves. If the children bring other caterpillars, they should bring with them some leaves of the plant upon which these caterpillars were feeding. The cabbage caterpillars must be provided with plenty of cabbage leaves. If, from time to time, the children have watched the development of the larvæ, there will be no further preparation necessary than to tell them they are going to hear about these curious creatures.

PRESENTATION.—The bright sunshine is awakening all sleeping creatures into life again. The worm has crawled out of his nest in the underground burrow; the snail has left his winter's hiding-place between the stones of the old wall; and in the garden a gay butterfly goes fluttering by. Where has it come from?

The Life History of the Cabbage Butterfly. (i) **The Eggs.**—When the warm weather comes, the cabbage butterfly leaves the hard gummy case, where she has been sleeping all the winter, and begins to lay her eggs. Although she does not eat leaves now, yet when she was a caterpillar she fed on cabbage leaves; so the butterfly mother lays her eggs under the leaves of this plant, in order that the young grubs may find food as soon as they are hatched. All butterflies lay their eggs on the kind of leaf they ate when they were in the caterpillar stage.

The cluster of eggs is fastened to the leaf
(c 241)

by a gummy substance which the insect has made for that purpose. Each egg is very tiny and has a hard case. Many butterfly eggs are laid on the back of nettle leaves, because cows and horses will not eat this plant. For about two weeks the eggs remain apparently the same, but at the end of that time the little grubs come out.

(ii) **The Caterpillars.**—(a) *Head.*—The caterpillar's head is horny and hard. It has about a dozen small eyes and a pair of hard jaws. These jaws are strong and broad, and work sideways as they cut the leaves into small pieces. These pieces are passed inside to be chewed by inner jaws. The lower lip is flat, and has a small tube passing through it. This is where the silk comes from when the caterpillar uses it a few weeks later.

(b) *Body.*—The caterpillar's body is made up of about thirteen rings (segments). There is a pair of legs on each of the 2nd, 3rd, and 4th rings. The caterpillar uses these six legs for walking or grasping its food. Besides these true legs, the caterpillar has five pairs of pro-legs or "cushion feet". The true legs are jointed, and have a tiny claw at each end, while the pro-legs are really only folds of skin with a circle of hooks. These spines help the caterpillar to cling to twigs and stems. Four of these pairs of pro-legs grow on the other rings of the body and a pair at the tail. Let children see how the caterpillar moves, and contrast with motion of worm. Show, if possible, a currant moth caterpillar, and children will see for themselves how it holds the leaf with its front true legs, arches its body, and draws its back cushion feet up to the other legs. It then lifts its true legs and, holding on to the leaf with its back cushion feet, casts its body farther up the leaf.

(c) *Habits.*—All the caterpillar does is to

eat, eat, and eat. It does not even use its mouth for breathing or making a noise, but only eats with it. The caterpillar breathes through holes in the sides of its body. The children will see that the caterpillar never ceases from its greedy devouring of bits of leaf. Every bit of food which is taken into its body is of use to the caterpillar later on, as the children will see.

It is quite evident that continual eating will swell the caterpillar's body until it is too big for its skin. The skin is too tight, and so must be cast off. The caterpillar leaves off eating for a while, and after a few hours he swells out the rings of his body until his skin splits. He creeps out head first, tail next, and then the rest of his body. When he appears there is a new coat, soft and elastic, already made on his back. This coat will stretch for a time, but caterpillar eats so greedily that even this in time becomes too small to hold all the food packed inside it. The second coat is cast off and a new third one appears. This moulting takes place about five times, and each time a new coat, perfect in every hair and joint, is ready. When the caterpillar begins to fast, the children, with careful watching, will probably see the actual change of skins.

(iii) **The Chrysalis.**—All the time the caterpillar has been eating a change has been going on inside its body, although the children cannot see what it is. After three or four weeks of feeding the time for rest has come. The caterpillar finds a safe place to sleep, and then casts off its coat for the last time. The children can now see the change that has been taking place. There are all the parts of the butterfly, not perfect as yet, but ready for development, and the whole looking like a little doll (hence the name pupa).

The caterpillar fastens itself to a wall or tree trunk by means of the silk it makes and passes through the tube in the lower lip. First it makes a little fastener of silk for its

tail, then, bending its head backwards, it weaves the silk across and back, across and back over its body until it is safe. A gummy substance oozes out of its body, and this, hardening, forms a protective covering. Show different chrysalides to the children, and let them try to find the eyes and feelers of the developing butterfly. All the time the creature is in the chrysalis state, the various parts of the future butterfly's body are being formed. The food which the caterpillar crammed into its body is now useful for supplying new material and energy. The wings, made of two layers of skin begin to grow, and the shoulders become strong to support them. The false cushion feet disappear, and the six true legs grow long and delicate. A pair of large eyes with many windows appears. Compared with these those of the caterpillar state seem small and insignificant. A long tube grows out of the small one in the lower lip; this tube will be used for sucking the honey of the flowers. The small stunted feelers of the caterpillar grow into the long and dainty antennæ of the butterfly. Tiny bags all crumpled and empty grow in the body, so that when the butterfly fills them with air they will help to make the body light.

(iv) **The Butterfly.**—At last the time comes when the creature splits its covering and appears once more in the living moving world. It feels uncertain and strange until the warm air dries and cheers its body. It spreads its beautiful scale-covered wings and lets the colourless blood flow inside them. Then, filling the tiny crumpled bags with air, it sails away for honey food, a graceful creamy butterfly.

ASSOCIATION.—Compare the chrysalis with the flower seed. The chrysalis contains everything needed to make the beautiful butterfly, not fully grown, but ready for full development. The seed contains all the parts of the flower, small and invisible, but

none the less surely there, and ready to burst out into bloom.

FORMULATION.—The butterfly lays eggs and fastens them to leaves. Caterpillars are hatched in a week or two.

They do nothing but eat. They have breathing holes in the sides of their bodies.

Their coats grow too small, and so they have to be cast off.

When caterpillars are about a month old, they fasten themselves to something and go to sleep.

Their bodies are covered with gum, which grows hard.

While they are asleep their butterfly body is growing.

When the sleeping time is over, the butterfly splits its hard case and comes out.

APPLICATION.—Get children to bring some butterfly eggs, and keep a drawn record on brown paper of the different stages of development. For further application, see "Manual Work".

Phonetics

PART I.—*Further Exercise in Production of Vowel Sounds.* PART II.—*The Sound "aw" as in "crawl".*

(i) The following exercise helps to get the vowel sounds clear and forward. Teacher plays suitable chords while children sing "Loo-o-a" (middle sound pronounced "o" as in "pole", "a" sung as in "father"). The lower doh in key D forms a good starting point. Teacher beats four slowly. The first, second, and third beats for the respective vowel sounds, the last for drawing in of breath for the next note. Ray, me, fah, &c., of key D are sung to "loo-o-a". Through this exercise the children see that breath comes out in the same way for all three vowel sounds. It is the mouth that changes the sound. Teacher asks how mouth acts.

(ii) "See these caterpillars busily eating

the cabbage leaf. How their jaws work! We will build 'jaw'. Show me your jaw, Fred. What is the first sound? Tom, find 'j' and put it on this ledge. The next sound? Ah! here is a stranger. You have not seen 'aw' before." Teacher produces card with "aw" printed on it, and tells class to repeat the sound. They build any of the following words:—Paw, saw, law, raw, claw, flaw, straw, crawl, awful, shawl.

Sentences for reading after word-building: These grubs are *crawling* on the cabbage leaf. I never *saw* such greedy things. Their *jaws* go, go, go. They like *raw* cabbage—I do not. How *awful* if a bird *saw* them!

Number

Number 8 continued.

$\frac{1}{2}$ of 8 = 4, $\frac{1}{4}$ of 8 = 2, $\frac{1}{8}$ of 8 = 1.

General exercises on 8.

"Jack Smith collected caterpillars for his day-school teacher. He got 8, and gave half of them to teacher of class 1 and half to class 2 teacher. How many did each teacher get?" Children work the exercise

for themselves and use sticks, which they call caterpillars. They print on boards, $\frac{1}{2}$ of 8 caterpillars = 4 caterpillars. If printed in exercise books, the whole sum could be shown in two lines—one of 8 wavy brown lines (caterpillars), and another below it of four wavy lines.

"The teachers of classes 1 and 2 asked

Jack to bring some lettuce leaves to school for the caterpillars to eat. Teachers of classes 3 and 4 were keeping caterpillars. They wanted lettuce leaves too. How many teachers? Jack brought 8 leaves to school. How many did each teacher get?" After children have divided 8 sticks into two's, they print on boards, $\frac{1}{2}$ of 8 = 2.

"Joe Fell could not find any caterpillars. He was disappointed. His teacher had 8 fuzzy ones. She said Joe should have $\frac{1}{8}$ of them if he could tell how many that was.

Joe put one caterpillar in his little box. Was he right? All divide your 8 sticks into 8 equal bundles. How many in a bundle? All say $\frac{1}{8}$ of 8 = 1. Print it on boards."

General questions: 4 twopences? How many farthings in 1*d.*; in 2*d.*? 3*d.* piece, 2 pennies, 4 ha'pennies, how much? Two horses, how many legs altogether? 4 sheep, how many ears? 4*d.* divided amongst 8 children, how much each? 3 worms, 4 more, and another, how many worms? One quarter wriggle away, how many left?

Story THE CATERPILLAR AND THE BUTTERFLY

A little caterpillar was one day crawling along the ground seeking for food. Above her happy insects darted through the air, their wings flashing in the sunlight.

"Ah," said she, with a sigh, "what a hard life is ours! We move with toil, and even then can never go far. We are kept near the ground; at any moment we may be trodden on. We climb rough stalks, and eat tough leaves; only now and then we find a flower. I am so tired! Those proud things, the bees and butterflies and dragonflies, never notice us. How gay their life is! They have only to spread their wings, and the summer winds bear them on.

"How gaily they are dressed! They are at home with the flowers. They live on sweets, see fine sights, and hear all that is to be heard. What do they care for poor things like me? They are selfish, and think only of themselves. If I had wings, and could move about with such ease, I am sure I would think sometimes of the poor worms down below. I would give them, now and then, a sip of honey or a taste of something nice from the garden. I would come down and speak a kind word, tell them something good to hear, and be quite a friend.

"Oh, if I only had wings, how much

good I might do! But those proud things never dream of that."

When the caterpillar was changed into a butterfly, she spread her wings, and passed the hours flitting from field to field, rocking in buttercups, and sipping sweet honey.

One morning, as she rested on a rosebud, she saw below her two worms making their way over the ground. "Poor things!" she said. "How little they know! I hope someone will do something to make them happy. If I were not so busy I would try myself. But I cannot spare a moment. There is a rose party to-day and a sweetpea party to-morrow. The bees and hornets are getting up a concert, and I must be there.

"The queen bee will soon have a great honey feast, and I must be there. The wasps are good policemen, and will keep away all those, like those two worms, who are not well dressed. Poor things! If I had the time I would try to do something for them; but every sunny day is taken up, and I could not think of going out in the wet. Besides, if I went down to them I might soil my wings. If I once speak to them they will expect me to play with them, and then what will my fine friends say?

"Here comes Miss Pink Moth! Are you

going to the rose party? How pretty you look! Wait one moment, till I have washed my face in this dewdrop. The sun has nearly dried it up while I have been looking at those low dirty worms. What a waste

of time! They are not worth thinking about, are they? Now, dear Miss Pink Moth, just one more sip, and then we will go."

And the selfish butterfly flew away.

—From Book I of *Blackie's Model Readers*.

Song—"THE MOTH AND THE BUTTERFLY"

—*Teachers' Times*, Oct. 26, 1906.

Game—THE CATERPILLARS

1. Eat, eat, eat, small cat - er - pil - lars are
leaves are break - fast, or din - ner, or tea. Oh!

food, food, food, we must pack a - way. Per-

haps 'tis rude, but lay.

2. Grow, grow, grow, tiny skins stretching too tight;
So ho, ho, ho! we'll cast them all off to-night.
Now swell, swell, swell till the coat is split;
Then all is well, creep out through the slit.
3. Creep, creep, creep, finding a snug place to hide;
Then sleep, sleep, sleep, everyone quite satisfied.
Now rest, rest, rest through dark winter's night,
For sleep is best till the sun shines bright.
4. Wake, oh wake! Summer is here once again;
So shake, shake, shake, dainty wings fluttering; then
The sun will dry all our bodies light,
Then off we fly far away from sight.

Directions.—*Verse 1.* Children walk slowly about, eating all the time. Occasionally they stretch their arms above their heads, hands together and palms outwards, and then curve them downwards. This is to imitate the curve the caterpillar's body makes when travelling.

Verse 2. Children stand with arms close to sides and bent at the elbows as if for running. At "Grow, grow, grow" they push out their elbows, but keep hands close to chest. At "Swell, swell, swell" the hands leave the chest, and arms stretch out in a semicircle. At line 4 the children push head and shoulders forward and step with feet.

Verse 3. All find a place of rest, e.g. a corner, desk, wall, and, turning head over shoulders, pretend to weave a cocoon. They go to sleep.

Verse 4. Children step out of imaginary cocoon and flutter their arms; then, tripping lightly on tiptoe, they "fly" round the room.

Blackboard Reading and Drawing

I am a Cabbage Butterfly. I have been asleep all the winter. No one knew where I was, because I hid myself in a hole in a tree trunk. The warm sun wakened me; so I crept out of my hard case. I found I had changed into a beautiful butterfly.

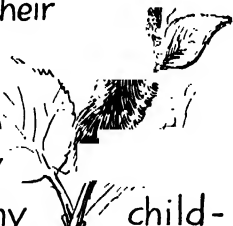


"Now, I must find a place to lay my eggs. Ah! this will do. I will lay them on this cabbage leaf. In about two weeks they will be hatched."



"Don't you think my baby caterpillars pretty? They have green coats with a yellow strip down their backs. My friend, Mrs. Tiger Moth, has some fuzzy caterpillars. She calls them Woolly Bears. She says her children are safe; the birds do not like the hairs on their fuzzy bodies."

"How busily my caterpillars are eating that cabbage! When I was a grub, I liked cabbage leaves; that is why I laid my eggs on them. It will soon be time for my children to go to sleep. They will throw off their coats for the last time. See this one; it has made a hard gummy case, and is fast asleep. It stays so still you might think it dead. It is getting ready to be a Cabbage Butterfly. Goodbye! I am off to the flowers."





Asleep.



The sun is gone down,
And the moon's in the sky;
But the sun will come up,
And the moon be laid by.

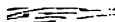
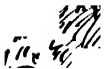


The flower is asleep,
But it is not dead;
When the morning shines
It will lift its head.

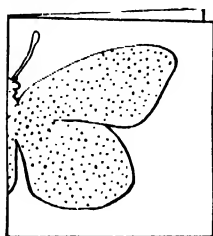
When winter comes,
It will die. — No, no!
It will only hide
From the frost and snow.

Sure is the summer,
Sure is the sun;
The night and the winter
Are shadows that run.

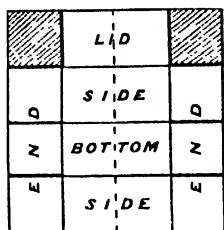
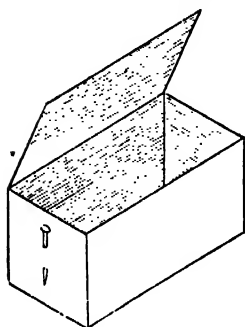
— Geo Macdonald



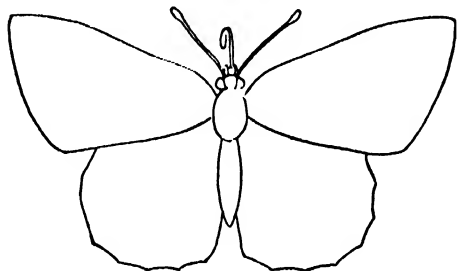
Other poems suitable for recitation:—1. "Queen Mab"—T. Hood, in Book III, *Blackie's Model Readers*. 2. "Ladybird, Ladybird, Fly Away Home"—Anon. 3. Ariel's song, "Where the Bee Sucks", &c.—Shakespeare.

Paper Cutting—BUTTERFLY

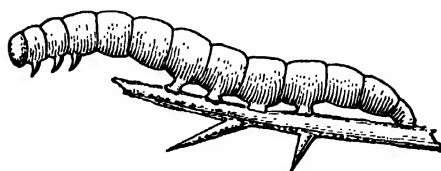
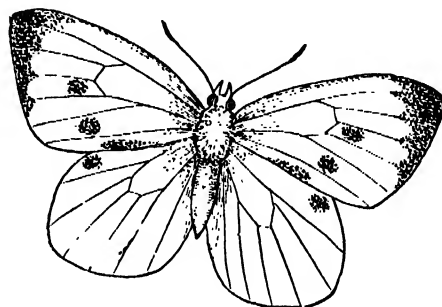
This may be cut out in white paper and afterwards coloured in the brush-work lesson, or it can be cut in coloured paper. The varicoloured patches may then be cut from gummed paper and fastened on.

Paper Folding -BOX FOR CATERPILLARS, WITH "GLASS" LID

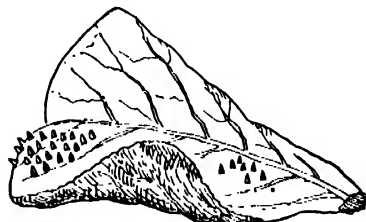
Cut away shaded portion, and cut out thick lines and fasten END over each other with a pin.

Free-arm Drawing—BUTTERFLY

Draw with both hands. Head and body should be drawn first.

Clay Modelling—CATERPILLAR FROM NATURE**Brush Work -CABBAGE BUTTERFLY**

Body, brown; wings, very pale yellow. When wings are dry put in dots of black or vandyke brown.

Brown Paper Drawing—EGGS OF BUTTERFLY

The cabbage leaf should be a light green; the eggs should be painted brown.

Object Lesson—THE SUN AND HIS WORK

PREPARATION.—Summertime is here with all its fullness of life. Not only the plants in the classroom are growing, but all life outside seems to be vigorous and happy. The children will be able to tell fairly well the reason for it. They should be required to express their ideas of the sun in their own words. The sun makes us warm; it lights the world like a huge lamp; it makes the grass, trees, and flowers grow; it wakens the sleeping animals and brings them out of the dark earth; it dries up the water in the puddles and ponds; it makes everything happy. These are a few of the thoughts the children will be eager to speak. If children are to thoroughly understand the lesson, at least three visits must be paid to the yard on a bright sunny day.

PRESENTATION.—(i) **Appearance.** Like a great ball of fire, so light that children cannot look at it without hurting their eyes. The light of the sun is so bright, that when objects are placed in it they cast shadows; the parts where the sun does not shine are almost black in comparison with those directly in the light. Here the teacher can let children tell about their shadows. They will be delighted to describe how these grow long and short in an instant. The sun is always shining. On the dark days it is hidden from us by clouds. If we could travel to the other side of the clouds we should find that the sun was lighting them up with dazzling brightness. Here the teacher can take her class outside to see if they can find a cloud between the sun and the earth. While waiting for the clouds to sail past, the children might learn the words, "Every cloud has its silver lining". The children will see for themselves that the inside of the clouds, or the side nearest the sun, is turned to silver in the daytime or gold in the evening.

(ii) **Journey.**—When the sun rises in the morning it seems to peep up out of the ground or from behind the hills like a red ball of fire. It paints the sky red, but as the day goes on and the sun gets higher and higher, the red disappears. The teacher should take the children into the schoolyard and let a child stand on a certain mark. The shadow cast by the child will form quite a topic of conversation. The children will be delighted to test for themselves that when they stand facing the sun their shadows always fall one way, i.e. behind them. The teacher should mark with chalk the outline of the child's shadow.

At noon the sun is at his highest. Perhaps at nine in the morning he may have been just peeping over the roof of a neighbouring house. When the children go out two or three hours later they will find he has moved away and left the housetop some distance behind. But this is not the only difference. The same child stands on the mark as before, and yet its shadow is not now in the position denoted by the chalk mark. It is also shorter than the nine-o'clock shadow. This is because the sun is higher in the sky. *N.B.*—The children will probably not be old enough to understand further than this, but if so much is taken properly, they will have had a furthering of interest which will tend towards careful future observation.

When the children go out again at about three in the afternoon the sun has moved still farther west, and the shadow cast by the child is different again. The sun is lower in the sky and the shadow has grown longer. Tell the children to look at the shadows cast by the trees at night. These are often longer than the trees themselves. Why? The sun sails lower and lower, until

at sunset it seems to dip into the earth. It is only continuing its journey to shine on other lands and make broad daylight for other boys and girls while we are asleep in the dark. When their night comes our morning begins, and the sun comes to us again and makes another glorious day.

(iii) **Work.** Gives light and heat. All light and heat, in the first place, come from the sun. The teacher can show the children how the gaslight which lightens their streets and homes at night is really sunlight. This was absorbed by plants and afterwards shut up in the earth with the decayed plants. When the miner dug the coal he was in reality digging those dead plants. The heat we get from the coal is really sun's heat, just as the light obtained by burning the coal gas is the sun's light.

The sunlight gives colour to things. The colours of spring flowers are paler than those of summer. Let the children give examples—Spring, snowdrop; summer, wallflower; spring, pale primrose; summer, red rose. The sun shines on the young green fruit and makes its cheek ruddy, purple, or yellow, according to the kind. Teacher can show the effects of sunlight on plants by uprooting some plant growing in classroom. Children will see the difference in colour between the white part of the stem, which has been underground, and the darker exposed portion.

The sun provides food for all things. It feeds the plants, which, in turn, help to feed men and animals. It provides clothing also; the clothes we wear have at one time been parts of plants or animals which rely on the sun for their existence.

The sun makes rain possible. Refer to spring lesson on rain, and let children see the connection. All day long the sun is drinking moisture from seas and rivers. It is drawing up water from anything upon

which it shines, even from plants and flowers. This moisture collects in the form of heavy threatening clouds, and when winds and mountains interfere it is again distributed in tiny raindrops all around.

Let children describe a damp day, and show how unhealthy it would be if the ground were always wet, and air full of mist and threatening rain. The children can give instances of the drying work of the sun, e.g. farmer's mown hay, mother's wet clothes on washing day.

The sunlight cleanses the earth. It is a great purifier. All dark places are unhealthy, while those houses which get a great deal of sunlight throughout the day are the best to live in. Not only is the actual sunlight healthy, but bright thoughts and feelings are engendered, and these tend towards the wellbeing of mind and body. The sun is a good medicine. Rooms which have been flushed with sunlight are freer from disease than those where the sunlight cannot penetrate.

ASSOCIATION.—Compare the work of the sun with the work of the child's own father, who toils all day that his children may be clothed and fed.

FORMULATION.

"Sure is the summer,
Sure is the sun;
The night and the winter
Are shadows that run."

— *George Mac Donald.*

APPLICATION.—Children give in their own language the work of the sun. They can make original picture stories of the sun in a free-expression lesson. The more freedom from careful lining in and fine work, the more successful will the result be. Originality of thought should be aimed at rather than symmetry and neatness.

Phonetics

PART I.—*Exercises in the Production of Sound "ay" as in "day".* PART II.—*The Symbols for the Sound taught.*

(i) Teacher sings "Oo-o-a-ay-ee" in one breath. She tells children to watch her lips, then asks them what they saw. For the first vowel sound the lips were pursed into a round ring; for "o" they were slightly widened; for "a" (as in "father") they were wider apart still; for "ay" they were drawn back at the corners; and for "ee" they were lengthened most of all. Children sing a song to "ay", or they sing the ascending or descending scales. Teacher checks any tendency to pronounce the sound "oy" or "i". She lets the children repeat the sentences printed below.

(ii) Short chat about the sun as time-keeper. He turns night into day. Two children step out and sound the word "day".

Left-hand child says "d"; right-hand, "ay". The class "goes to sleep" while the two find their symbols. "d" is easily found, and teacher puts a card printed "ay" in hands of second child. Children "wake up" and tell that although "ay" is only one sound it requires two letters. Different children take symbols—b, h, j, l, m, n, p, r, s, w—from table, and change the word into bay, hay, &c. Record of lesson:—Drawing of sun and rays, printed "rays".

Sentences for blackboard: A lad lay asleep. His name was Tom Bray. It was May Day. "Wake," said the sun; "you may play all day in the hay." Tom and Ray played until the sun's rays went away. They had a gay time.

Number

Number 9.

The following exercises are worked by the children with sticks or counters. They also draw simple objects with figures and signs at the side to show what the exercises have been. One question only is given in each set to serve as a specimen of the way teacher connects with nature work.

(a) Nine little girls had a sunshade each but one. How many sunshades?

$$\begin{array}{ll}
 8 + 1 = 9 & 7 + 2 = 9 \\
 9 - 1 = 8 & 9 - 2 = 7 \\
 1 + 8 = 9 & 2 + 7 = 9 \\
 9 - 8 = 1 & 9 - 7 = 2 \\
 6 + 3 = 9 & 4 + 5 = 9 \\
 9 - 3 = 6 & 9 - 5 = 4 \\
 3 + 6 = 9 & 5 + 4 = 9 \\
 9 - 6 = 3 & 9 - 4 = 5
 \end{array}$$

(b) The warm sun wakened sleeping animals. 2 small worms wriggled out, 3 cater-

pillars began to feed, and 4 birdies fluttered their wings. How many wakened?

$$\begin{array}{l}
 \left. \begin{array}{l} 1 + 2 + 6 \\ 2 + 6 + 1 \\ 6 + 1 + 2 \\ 6 + 2 + 1 \\ 2 + 1 + 6 \\ 1 + 6 + 2 \end{array} \right\} \dots 9.
 \end{array}$$

$$\begin{array}{l}
 1 + 5 + 3 \\
 5 + 3 + 1 \\
 3 + 1 + 5 \\
 3 + 5 + 1 \\
 5 + 1 + 3 \\
 1 + 3 + 5
 \end{array}$$

(c) Uncle Nat bought 9 sunbonnets for his little nieces. They had one each. How many nieces had Uncle Nat?

$$\begin{array}{l}
 9 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 = 0 \\
 9 \div 1 = 9 \\
 9 \times 1 = 9 \\
 1 \times 9 = 9.
 \end{array}$$

(d) 9 green cherries grew on a tree. The sun kissed 3 green cherries and made their cheeks red. He kissed 3 more and made them red also. Then he kissed another 3 green cherries and made them red. How many green cherries left?

$$9 - 3 - 3 - 3 = 0$$

$$9 : 3 = 3$$

$$3 \times 3 = 9.$$

(e) Willie is saving up for a sun hat. It will cost 9d. He has only saved half of the money yet. How much has he still to save?

Story—THE SUNBEAM FAIRIES

Old Father Sun was out of temper. He was not often cross, but to-day he had good reason, and this was it. The clouds had covered his face so that the people could not see it. He liked to make everyone else merry; but what was the use of smiling if the heavy clouds rolled between him and those he wanted to make happy?

He said to his sunbeam children: "My little ones, go down to the earth and cheer up the people there. They have had quite enough of shadow. Perhaps the clouds will let you pass. You will be able, at any rate, to peep through, whereas I, with my big head, could not." No sooner had he spoken than three golden sunbeams darted towards the earth.

The first sped towards a great smoky city. She shone down a narrow street, and danced on a window which was covered with dust. There was an old spider's web in one corner of it. The woman of the house was surprised at seeing the sunbeam. It was not often that one found its way down this poor street. "I have not noticed before how dirty that window is," she said, as she swept the dust and cobweb away and let the sunbeam into the room.

She darted round and round a little baby's cot, and played hide-and-seek with the child. What fun that baby had, and what a number of times the sunbeam fairy came near being caught, but sprang away just in time! Once the golden gleam crept up slowly, slowly towards the tiny hand. Carefully, carefully

the little one stretched out his fingers and caught her. But when he gurgled with delight to think he held the lovely thing, there she was shining again on the back of his hand! The mother was full of joy. "Ah, now," she said, "I will get on with my work; baby seems so happy and content. How glad I am that the sunbeam fairy found her way into my home!" She worked away, and thought of other happy times when every day seemed full of sunlight.

The second sunbeam fairy shone in a dark shady wood. There the flowers were drooping and sad. "Stop drooping," the sunlight fairy said, as she tripped between the trees; "I am here to fill the wood with light and cheer you all up. You, you sweet windflower, need some colour in your pale cheek," and the fairy smiled on the dainty windflower until she blushed for joy. The blush stayed on the delicate white petals and painted them a lovely pink. "You little white lilies need no colour, but I will fill you with sweet perfume", said the fairy; and she poured a fragrant scent into the wee white bells. Then she shone on the raindrops and turned them into diamonds; she sparkled on the rippling stream until it looked like a winding silver ribbon; and she cried to the insects, "Come out, come out!" She filled the wood with the droning and humming of hundreds of busy little workers. Even the waterfall seemed to sing a sweeter song because the sunlight fairy was in the wood. At night, when the sun was setting and

the gentle sunbeam had to go back to her home in the sky, the tired little creatures said, "What a happy day we have had!" and the flowers nodded "Yes."

The third sunbeam fairy was stopped by a huge black cloud. "Please let me through," she begged. But the more she pleaded, the more threateningly frowned the cloud. She would have cried; but what is the use of a sunlight fairy with a dull and tearful face? So, instead, she shone on the inside of the cloud and turned it to dazzling gold.

Far down below a man and woman were walking. They were so sad that the man wished to live no longer. "Wife," he said,

pointing upwards, "our life is just like that cloud, black and heavy. There is no joy anywhere for us;" and he turned away and hid his face between his hands. The woman lifted her thin white face towards the cloud, and saw the sunbeam trying to shine through. Her face lighted up, and she cried, "Look! See behind it all the lovely golden light! Take heart, my husband; it may be that, like that cloud, the blackness of our life still holds behind it some golden joys for us." The husband looked up and saw the golden edge of the cloud. He took his wife by the hand, and together they turned homewards with lighter steps and hearts made strong with hope.

Other stories:—"The Wind, the Sun, and the Traveller"—*Æsop's Fables*. "Phaethon"—Greek Myth

Song—"IF I WERE A SUNBEAM"

Game—CLOUDS AND SUNBEAMS



'When we shine the clouds so grey
Seem to say
'Go away;
Come again another day,
Golden Sunbeams'."

'Shine away and have no care,
Fill the air
Everywhere
With your rays of light so fair,
Golden Sunbeams."

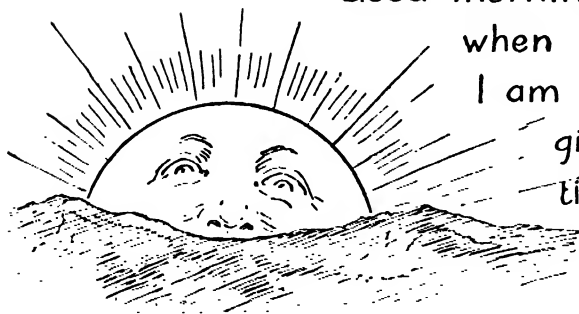
Directions.—*Verse 1.* This game is rather noisy, and is therefore more suited to the playground than the classroom. The sun, one of the elder boys, stands behind the sunbeam children, who are in a row. In front of these are a number of cloud children, who stand holding hands sufficiently far apart to allow the "sunbeams" to dart through them. All are facing the "earth", viz. the opposite wall. The object of the "sunbeams" is to try to reach the earth; the game for the clouds is to stop and catch the beams before they can accomplish it. The sun sings this verse.

Verse 2. The sunbeams reply, and get ready to dart out.

Verse 3. Whilst the sun is again urging them to shine, the "sunbeams" burst towards the "earth". Those who are caught before reaching it must stay behind the clouds. When all the sunbeams are caught, a tug-of-war between the clouds and sunbeams will make a happy ending.

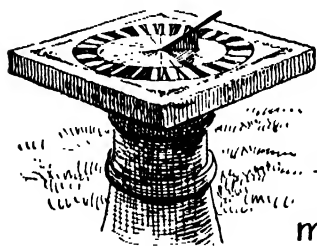
Another game can be made by adapting "Little White Lily Sat by a Stone", by Geo. Mac Donald, in *Recitations for Infant Schools*, by M. Riach (Blackie).

Blackboard Reading and Drawing



Good morning! your work begins
when I show my red face.

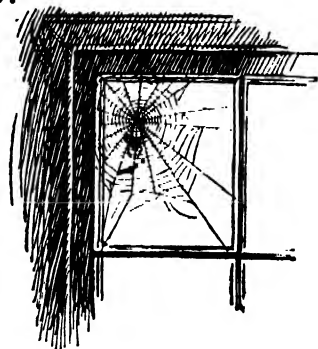
I am very, very busy. A little
girl once said I had God's
time to keep. That is true.
I never have time to sleep
or rest. When you
are in your beds, I am shining for other boys and girls
in far-away lands.



"Do you know what this is? It is a sun-
dial. Have you ever seen one? Can you
tell the time by it? A man who loved
flowers once made a flower clock. He planted
many kinds of flowers in his garden; and, when
he saw which flowers had their petals open, he could tell the time.
He could tell the time by looking at the flowers which were asleep
as well. They waited until I kissed them, and then they folded
their petals and nodded their sleepy heads.

"Open your doors, draw back your blinds,
and brush the cobwebs away. Let me
into your houses, I will do you good.

"I am a doctor; but *my* medicine is good
to take. In the summer, when I smile
to see you play, you sit down to fan your-
selves 'It is hot; I hear you say.'





Hiawatha's Rainbow.

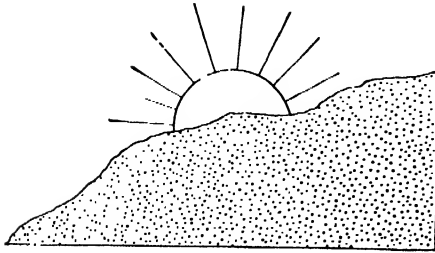
Longfellow.

Then the little Hiawatha

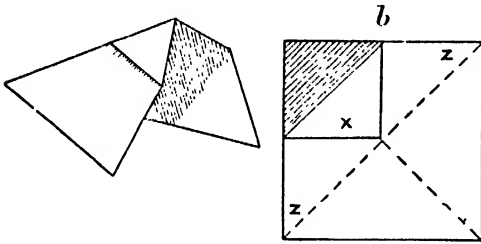
Saw the rainbow in the heaven,
In the eastern sky the rainbow,
Whispered, "What is that, Nokomis?"
And the good Nokomis answered:

" 'Tis the heaven of flowers you see there;
All the wild flowers of the forest,
All the lilies of the prairie,
When on earth they fade and perish,
Blossom in that heaven above us "

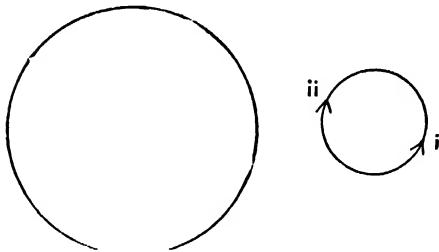
Other poems suitable for recitation:—"Little Sunbeam"—Alan Reid, in *Recitations for Infant Schools* by M. Riach (Blackie).—"If I were a Sunbeam"—Lucy Larcom, in *Blackie's Model Poetry Books*, Infant School.—"Little White Lily"—Geo. Mac Donald, in *Model Poetry Book*.—"My Shadow"—R. L. Stevenson.—"Summer Sun"—R. L. Stevenson.—"The Sun's Travels"—R. L. Stevenson.—"Asleep"—Geo. Mac Donald, in *Blackie's Model Readers*, Book II.

Paper Cutting—RISING SUN

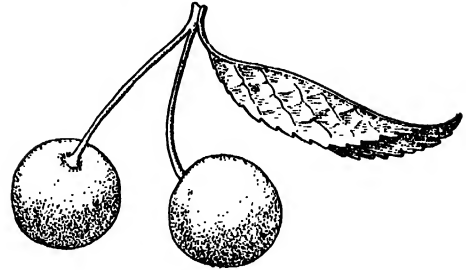
Hill, dark brown; sun, a circle of crimson. Paste sun on the mount and then cover half with the hill, thus suggesting the half-hidden sun.

Paper Folding—GARDEN SHELTER

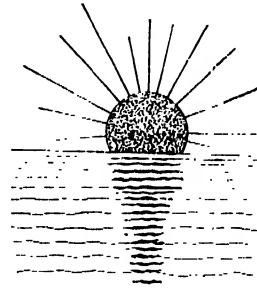
Fold as in (b), and then fold Z to Z, leaving flap X outside.

Free-arm Drawing—THE SUN

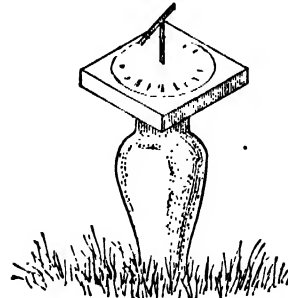
Let the children draw circle first in direction i, then ii with right hand, then afterwards with left.

Clay Modelling—CHERRIES

Insist on the cherries being modelled and not rolled. If natural stalks and leaves are provided, the effect is decidedly good. *N.B.*—If cherries cannot be obtained, have a banana or lemon for a model.

Brush Work—THE SETTING SUN

The sea should be painted first in faint blue lines, slightly waved. When dry, paint the crimson sun (or gold if preferred). Last of all, paint the glow of the sun on the water.

Chalk Drawing—SUNDIAL

Stone, grey or white; hand, brown; grass, green.

Object Lesson—TREES

PREPARATION.—The teacher should pay a visit to the woods previous to the lesson, and get as many seedlings as possible in order to provide ample illustration. If possible the teacher must take her class for a walk through the nearest park or public gardens, so that the children can see the trees in their full summer beauty and amidst natural surroundings. Where this cannot be done a visit must be paid to the nearest tree, even if that should only be one surrounded by railings in the school yard. Pictorial illustrations are insufficient for this lesson.

All plant life depends on the sun, and now that he is getting towards his greatest strength the trees seem especially to benefit. A short chat on this part of the sun's duties, combined with a visit to the trees themselves, will be ample preparation of the children's minds.

PRESENTATION.—(i) **What Trees are.**—Trees are only well-grown plants. They have their beginnings in seeds, just as smaller growths have. Here the teacher can show an acorn which has been set in the neck of a bottle filled with water for some weeks. The children will be delighted to know that if this baby plant were set in the earth it might in many years become a sturdy tree.

(ii) **How Trees Grow.**—Trees grow in just the same way as the bean plant the children have been growing in classroom. If a chalk record on brown paper has been kept, illustrating the various stages of development, this will be the easiest means of freshening the children's memory. First there is the seed, which contains and feeds the young plant until the root pushes out and the shoot reaches the light. Here the teacher can give each child the kernel of an almond. When the skin is removed the two cotyledons easily separate and disclose the rootlet. Possibly the plumule or above-

ground part of the plant will not be sufficiently grown as to be visible. A pea-nut treated in the same way shows the young plant quite clearly. The children will be keenly interested in seeing the waiting "plant children" in the following easily obtainable seeds:—Chestnut, acorn, pea, hazel nut, and walnut.

The root grows and spreads; root-fingers multiply and grip the earth. At the same time the stem grows longer and stronger, and small buds appear on the sides and tip.

(iii) **The Stem of a Young Tree.**—The teacher cuts the stem of an oak seedling across, and, after showing children the section, makes an enlarged drawing of it on blackboard. They notice the soft moist inner circle surrounded by a light-coloured woody portion. Outside this is a skin or coat. The inmost circle is the pith; the whitish woody circle is where the sap flows up and down between the roots and the foliage. The outer coat is the bark; cf. the use of the shell of the bean seed, or skin on children's hands. The use of this bark overcoat is to protect the sap from the scorching rays of the sun, rain showers in summer, and frost or cold in the winter. During the winter months this coat is air- and water-tight, but in summer small holes like mouths open to breathe out all the moisture and gases for which the tree has no need.

After growing all spring and summer of the first year the seedling rests. The sap which has been flowing up and down stops for the winter. Next spring the buds at the tip grow out into branches. The sap begins to flow in a circle outside last year's sap ring, and thus forms another white, woody portion between it (the first ring) and the bark. The new branches, if cut, will show the same section as the seedling of one year's growth, but the two-year-old portion of stem will show two rings of wood. The bark

grows thicker also; at the same time as the new ring of wood was forming a thin layer of bark grew inside the old bark circle. If possible show a section of some considerably older plant, because in very young seedlings the rings are not very easily distinguishable.

Next winter the plant rests again, and in the following spring the same process goes on. It is thus fairly easy to make a pretty accurate calculation as to the age of any tree after it has been cut down.

(iv) **How the Tree Lives.**—The only really living parts of a tree are the rootlets, the band of newest wood and bark, and the twig tips with their buds and leaf blossoms.

Some trees, such as the oak and the ash, have very deep roots. Although these roots are too far below the surface of the soil for the frost and cold to affect them, yet they rest during the winter. This is because the growth of those parts of the tree above ground has been arrested by the cold, and there is no longer any demand for food. When spring comes the rootlets are very busy. They are fitted with tiny tubes as fine as cobwebs. These fine, hair-like pipes can drink up a great deal of moisture. In dry weather these tubes creep in and out, round and about the grains of the soil, eagerly searching for water.

The band of new wood carries up the sap, and serves to protect it also.

The tiny tips grow every spring and make fresh food for the tree.

The old roots are usually too hard to absorb much moisture, but they serve the purpose of holding the tree firm against the

force of great storms. Even these strong roots would be useless were it not for the hard wood in the middle of the trunk—wood which has been formed from old sap zones, once soft, but now compressed into such hardness as to make the trunk strong enough to resist tempests.

(v) **The Value of Trees.**—When living they form a pleasant shade from the sun. They are a shelter for birds and animals, whilst numerous insects make their homes in them. They yield fruit, which feeds not only mankind but birds and animals as well. They help to beautify the earth with their changing colours and various shapes. They absorb gases from the air which are harmful to man.

When cut down they are converted into all kinds of office, school, workshop, and household furniture. Conveyances of nearly all kinds, from the baby's mail-cart to the mighty merchant vessel, are made of wood.

Medicines, oils, and scents are a few of the many things which we get from trees.

ASSOCIATION.—Compare the life of a young acorn seedling with that of the wheat or bean plant. Associate with the lesson on the sun, and show influence he exerts on growing trees.

FORMULATION.—

“Little by little the bird builds her nest,
Little by little the sun sinks to rest;
Drop after drop falls the soft summer shower,
Leaf upon leaf grows the cool forest bower.”

APPLICATION.—Seeds and nut kernels can be planted in classroom. Brown-paper records can be prepared. For further application see “Kindergarten Occupations”.

Phonetics

PART I.—*Breathing and Vowel Sound Exercises.* PART II.—*The Symbol for “ai”.*

(i) Children stand with hands on ribs, chests thrown out, and mouths open. They inhale slowly, while teacher plays doh, me,

soh (or d, r, m, f, s, l, t) of Key D. When the upper doh is reached, children sing it to “ai”, as in “wait”. Key C is played in

the same way; top *doh* is sung to "ai". Key B is next taken, &c. Children do not sing above D on the fourth line of stave, because straining after high notes takes away their attention from the pronunciation of the sound. The mouth is open during breathing in, so as to ensure a forward sound. When the mouth is closed during inspiration there is often a click of parting lips and a hard catch in the throat at the commencement of the sound.

(ii) Short chat on picnic to woods. Children go by train. They wait in waiting-room. "I want you to build 'wait'; but

before you begin I must tell you that the 'wait' 'ai' is not like the 'ray' 'ay' you learned last week. Here is the 'wait' 'ai'." Teacher produces a card bearing "ai". Children build such words as *fail*, *mail*, &c. Record of lesson:—Drawing of railway waiting-room, marked "wait".

Sentences for reading:—"Jim and Daisy are singing *gaily*. They are going by *rail*. They have *lain* so long in bed they will not have to *wait* for the *train*. How it *rains*! There is no *hail*. The trees *raise* their arms. '*Wait* here', they say; 'we will not *fail* to keep you dry'."

Number

Number 10.

Notation of 10.

"Last week we did our exercises with 9 sticks. This week we will put them all into a little house." Teacher draws a house on board. "Instead of this house being called 'Beech House' or 'Ash Croft', we will call it 'Unit House'." Children suggest reason for names and numbers for houses. "Where is the number of your house, Sam? Very well, we will print the name of this house over the door. I will also put the figure 9 under the house to show how many are living in it. 'Unit House' is only small. It will not hold more than 9 units. What will the family do if another unit comes?" Teacher holds up a stick and puts it with the 9. Children suggest moving to a bigger house. Teacher draws a larger house, and calls it "Tens House". She impresses the fact that the larger or "Tens House" must always be to the left of the "Units House".

"In the 'Tens House' only families of 10 units can live. Now there are no units living in the 'Units House'; it is 'To Let'. The windows are bare, and there is no smoke to be seen. We had 9 printed below it when 9 units lived there. We will put 0 now to show the house is empty.

"What about the 'Tens House'? We will put 1 below that house to show there is 1 whole family of 10 units there." Teacher holds up 10 sticks which she has tied in a bundle. "We do not need to say how many there are in the family; we know there are 10 units."

Now that we know all about the houses we need not draw them every time; but if we want to show there is one family in the "Tens House" and no units in their house, we can write $\begin{smallmatrix} T & U \\ 1 & 0 \end{smallmatrix}$. The T is for the name over the door of the "Tens House", and U for the name over "Unit House" door.

Story—ONLY AN ACORN

A boy and girl were sitting in the shade of an old oak tree. They were very hot and tired, for they had been playing in the sun

all the warm summer afternoon. "I mean to sleep," said the boy, who was bigger than his sister; and he lay down on the soft grass.

The little girl shut her eyes, and was just going to sleep also, when something fell on her lap. "See, brother!" she cried; "the pretty thing that has fallen from the tree. It is like a tiny egg in a fairy cup." "It is only an acorn," said the elder child; and he turned over to go to sleep. "Only an acorn, did you say?" said a low deep voice. Both the children started. There was no one in sight, and yet they both had heard the voice. "Don't be frightened," it said. "It is I, the old oak tree, who am speaking to you. Listen; I will tell you a story.

"Once upon a time a tiny acorn grew on an oak tree. It was very happy, until one day it heard the other acorns talking to each other. 'Yes, it is quite true,' one of them said. 'It will not be long before the squirrels pick us for their winter store.' 'It is a great pity that we cannot stay here for ever with the old oak tree to care for us,' another replied; 'it is much nicer than being packed in the dark in the squirrel's tree cupboard.' 'There is perhaps worse than that in store for us,' said a third. 'Our shells may be cracked, and we ourselves nibbled up by these greedy animals as soon as they spy us.' This conversation so frightened the little acorn that it began to tremble.

"At last, one day when winter was drawing near, those dreadful squirrels visited the oak tree and began their search. How busy they were eating the big ripe acorns there and then; and carrying others back to their homes. The poor little acorn was full of fear; but it need not have been so, because the squirrels did not care for tiny acorns when full-grown ones were to be had for the picking. So the little acorn was left on the tree, and it was happy again.

"Some time after, the old mother-tree said: 'Come, my acorn-children, I have carried you in my arms long enough. It is time for you to leave me and do the work you can never do if you stay here

to be nursed.' So saying she shook her branching arms, and the acorn fell with many others to the ground. It dropped on its side with such a shock that it rolled out of its cup far away from the others.

"The poor acorn was now very sad and lonely, for the wind had rolled it farther than ever from its playmates, the other acorn children. It lay on the ground in a sad plight. The rains fell on it, and made its shell overcoat, which used to be so bright, torn and soft. But this was not the worst that happened. A cow which was passing that way trod on the unhappy acorn and crushed it down, down in the dark moist earth. 'Now I shall die,' the acorn said. All the winter it stayed there as if it were dead; but when spring came the rain voices wakened it. It began to long for the bright light and blue skies once more, and started to climb towards them.

"At last its shoot fingers reached the light, and grew into an oak sapling. How proud and happy the young plant was! 'This is far better than being rocked in a cup cradle like a baby,' it said. 'I mean to grow strong and tall like my old mother-tree. Year after year went by, and little by little the sapling became a mighty oak tree. No other tree was quite so strong and brave, and no other tree so old as this one. Look at me now! Do you not think I am worthy of the name 'King of Trees'? And I am that same tree whose story you have just heard."

The boy and girl gazed in wonder at the great gnarled trunk and strong twisted branches. "It is quite true," continued the old oak. "Now let me tell you about my acorn children. Although I was once only an acorn child myself, yet I have had many children. You, little girl, are holding one of them now in your hand.

"One of them became a tree, and was cut down by men who wanted something strong

enough to fight the stormy waves. It was used in the building of a mighty ship. Instead of being rocked by the winds in the woods it faces the gale and carries men and women across the seas. Another child of mine was cut down and carved into many beautiful things. You can see the carvings any Sunday in your own church. I could tell you about my other children: how they stand like giants in the forest; how they feed the squirrels and the woodpeckers; and how they provide a home for thousands of wonderful little insects. I could tell you how the mistletoe you decorate your homes with at Christmas grows round their branches, and how men strip their bark for

the tan they use in making leather. All this and more I could tell you if I had time. Ugh! how the wind plays among my branches and rocks my hiding birds to sleep. My arms are getting stiff; they have been outstretched for more than three hundred years. To think that I was once 'only an acorn'!"

The old oak tree ceased speaking, and the children turned to each other and found they had been asleep. The strangest thing about it was that they had both dreamed the same dream. "Brother, let us plant the acorn-child and see if it will grow," said the little girl, and she held her treasure tightly in her hand.

Other stories:—"Red Riding Hood"—Old Fairy Tale. "The Babes in the Wood" (adapted). "The Fir Tree"—*Favourite Fairy Tales*, by Hans Andersen ("Blackie's School and Home Library"). "Robin Hood."

Song—"THE BRAVE OLD OAK"

—Words by H. Chorley, music by E. J. Loder.—*Beecham's*, vol. ii.

Game—THE PICNIC IN THE WOODS



1. Oh! here we come to the dell, To
hear the birds at their joy-ous lay.

2. Hurrah, we know 't is time for tea.
Our table is the ground;
The cloth is spread, we laugh with glee,
And seat ourselves around.

3. 'T was jolly playing in the glade,
Away from scorching sun.
We thank you for your pleasant shade,
Dear trees; now home we run.

Directions.—*Verse 1.* Several of the taller children stand with arms outspread to represent the trees. One or two smaller boys nestle close to them and whistle softly, imitating birds. Two girls carry a basket between them. They bend as if beneath its weight. They are followed by the remainder of the picnickers.

Verse 2. After gathering flowers, the children stand round the basket, while the eldest girl takes from it a cloth (sheet of paper would serve equally well), and proceeds to spread it on the ground. All children sit round it and pretend to eat and drink.

Verse 3. The children rise, pick up their flowers, and some help to fold cloth. They point to the "scorching sun", and then turn to the trees to thank them. The two girls pick up the now empty basket, and swing it merrily as they walk out of the woods, surrounded by the other picnickers.

Blackboard Reading and Drawing



"Take off your hats to me!" I am a sturdy old Elm Tree. I am more than two hundred years old - older than anyone living. I have been very brave standing here. The Sun has done his best to scorch me up; and the Storms have tried to break me; but you see I am here still.

"Once, I was a little sapling; and before that I was a tiny seed in the middle of a leaf



Here is a picture of me. One day the wind blew the leaf off the tree, and down I was carried to the ground. I sank into the soft earth, and after a time, began to grow.



"Here are some of my leaves. Can you tell them from the leaf-children of my old friend, Mr. Beech-Tree?"

"When it is summer and my roots have got me more food than I need, I open these small mouths you can see on my trunk and breathe it out.

I have many hollows in my trunk where birds love to build their nests."



Trees.

— Sara Coleridge.



The Oak is called
the King of Trees;



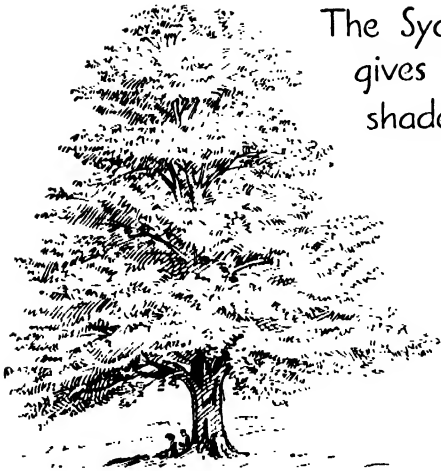
The Aspen quivers
in the breeze:



The Poplar grows up
straight and tall;



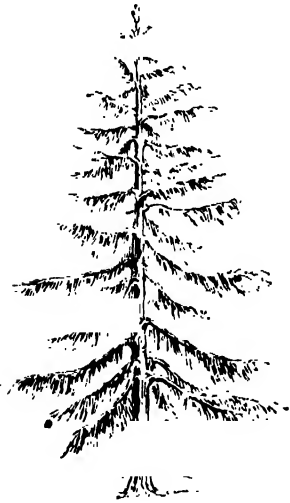
The Pear-tree spreads
along the wall.



The Sycamore
gives pleasant
shade;



The Willow droops
in watery glade;



The Fir-tree
useful timber gives;

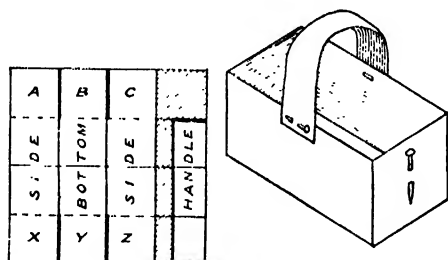


The Beech amid the forest lives.

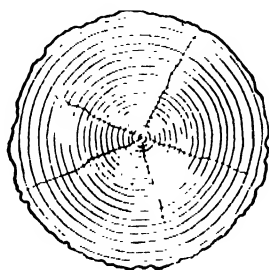
Other poems suitable for recitation:—1. "Wishing"—W. Allingham, in *Blackie's Model Poetry Books for the Infant School*. 2. "A Child's Song in Spring"—E. Nisbet. 3. "The Fruit Tree"—Björnstjerne Björnson, in *Palmerston Readers*, Book I. 4. "Mine Host of the 'Golden Apple'"—Thos. Westwood, in *Blackie's Model Readers*, Book III.

Paper Cutting—A SHADY WOOD

The trees are cut out in brown paper. After being pasted on a white ground, their green leaves can be put in by crayon or paint. The grass may be cut from green paper, or painted with the leaves as desired. A few dots of colour (red and blue) among the grass make an effective picture.

Paper Folding—RED RIDING HOOD'S BASKET

Fold square as above, and cut away the shaded portion, which is waste. The thick lines are to be cut, and the squares ABC, XYZ are folded at dotted lines; these form ends of basket, which must be pinned. The handle is then fastened by gum or pins.

Free-arm Drawing—SECTION OF A LOG**Clay Modelling—A LEAF (OAK)**

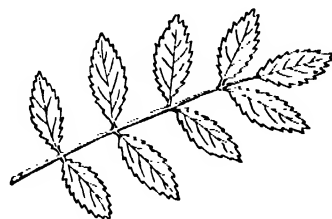
Provide each child with a real leaf. Steps:—Circle, oval (the broad end for tip of leaf), oval flattened, curved edges pinched out, veins marked with pricker or modelling knife.

Brush Work—A TREE

Paint trunk and branches in brown the first. Commence at tip of branch with thin stroke. All branch-strokes join to form trunk.

Brown-paper Drawing—MOUNTAIN-ASH LEAF

Let each child have a natural specimen to copy from, and show the steps which ought to be taken, on the blackboard. The main stalk and midrib of each leaflet ought to be the guiding lines. Clean blackboard in order to ensure the children having no copy but their own model.



Object Lesson—THE DANDELION

N.B. The details of the dandelion floret may be omitted if desired.

PREPARATION.—Provide each child with a dandelion and leaf. Have on the table several buds and a carrot. The whole dandelion plant, placed in a glass of water, will prove valuable for demonstration. Provide dandelion “clocks”.

Dandelions seem to reflect the brightness of the sun; they have well been called the stars of the daytime. Get children to express in their own language the meaning of this.

PRESENTATION. — (i) **The Dandelion Head.**—This is an inflorescence, and consists of from one to two hundred flowers, which grow on the cushion-like end of the dandelion stem. (Show an old dandelion from which all the seeds have flown.)

(a) **One Flower.**—Let children remove one flower carefully from the head of the stalk and examine. They will find the little bag at the bottom (the “seed bag”), and the hairs growing at the top of this bag. They may not easily find the anthers (“powder boxes”) growing round the forked stigma which curls back on the style. [*N.B.* These terms, “style” and “stigma”, should not be told to the children.] The flower seems to have only one yellow leaf, but there are really five petals joined together. The children may see this by looking at the notched edge of the strap-like corolla.

(b) **Green Bracts.**—These grow all round the dandelion flowers in two rows. The inner row is erect and helps the head to close, while the bracts of the outer row curve downwards to keep out insects. After pollination, the bracts close until the fruits have ripened. Then they open wide to allow the seeds to be blown away at the first puff of wind.

(ii) **The Flower Stalk.**—Round and hollow; smooth and soft. It contains a milky juice.

(iii) **The Leaves.**—Smooth and shiny. Very deeply cut, with the points of the leaf turning towards the base. The edge is very jagged and tooth-like, hence the name “Dandelion”, from the French *dent-de-lion*, lion’s tooth. The leaves are broadest near the top. They have no true stalk. They contain a milky juice. Let children break a leaf and squeeze it.

(iv) **The Root.**—A tap root (i.e. a strong upright root descending vertically). The root has several small branches. It tapers like the carrot (show carrot), and contains a milky juice like the leaves. The dandelion has a creeping, underground stem. Each year the leaves and flowers die down almost to their base. Out of the axil of these a bud grows, which produces leaves and flowers next year. (Show “rhizome”, but avoid using the name.)

(v) **The Fruit.**—After fertilization the corolla withers, and the one seed in each ovary ripens. The “beak” which bears the silky hairs (sepals) lengthens, so that, when the wind blows, these hairs at the end of it act as sails. By means of these “sails” the seeds have been carried for miles. Let children say how plentiful the dandelion plant is. They can now account for its profusion.

(vi) **The Uses of the Dandelion Plant.**—To beautify the earth; to provide medicine. Sometimes the root is roasted and ground, then mixed with coffee.

ASSOCIATION.—As this is the first flower lesson of the term, it will not be possible to give a distinct association. After the lesson

on the daisy, however, comparisons and contrasts will form a good one.

FORMULATION.—

"God might have made the earth bring forth
Enough for great and small,
The oak tree and the cedar tree,
Without a flower at all. . . .
Springing in valleys green and low
And on the mountains high,
And in the silent wilderness
Where no man passes by.

"Our outward life requires them not;
Then wherefore had they birth?—
To minister delight to all,
To beautify the earth;
To comfort man, to whisper hope
Whene'er his faith is dim;
For whoso careth for the flowers
Will much more care for him."

—*Mary Howitt.*

APPLICATION.—The usual occupations.

Object Lesson—THE DAISY

N.B. Omit details of daisy florets if desired. These are so small that, unless in the hands of a capable teacher, they will prove uninteresting to small children.

PREPARATION.—The apparatus necessary for this lesson is as follows: A daisy and leaf for each child, a dandelion flower and leaf each for comparison, daisy flowers in different stages of growth, several daisy roots, a sunflower, and complete daisy plant.

The previous lesson was about a well-known flower, and to-day's subject is equally familiar. It is very much like the daisy in many respects, and so different in others that it forms a good companion study. No further preparation of children's minds is necessary than to get them to bring as many of these flowers as they can to school.

PRESENTATION.—(i) The Daisy Head.—This is not one flower but, like the dandelion, a collection of hundreds of tiny ones. (Show by taking out one or two.) It consists of two kinds of flowers, the yellow disc and the white ray flowers. Compare the size of the dandelion and daisy heads.

(a) *The Disc Flower.*—The corolla consists of five petals joined to form a tube. Contrast with strap-like joined petals of dandelion. The forked stigma is like that of the dandelion, and acts in the same way—curling back on its pollen-covered style if cross pollination has not taken place.

(b) *The Ray Flower.*—White, often tipped

with crimson. It grows round the disc flowers and beautifies the whole head, thus making it more attractive to insects.

(c) *Green Bracts.*—These are hairy and overlapping. Contrast with dandelion. They serve the same purpose as the dandelion bracts. The fine hairs on the stem as well as those on the bract-leaves perform the work of protection.

(ii) *The Flower Stalk.*—Round, solid, covered with downy hairs. Contrast with dandelion; also compare length of each flower.

(iii) *The Leaves* grow out in a rosette form; pressed quite close to the ground as if to prevent weeds from growing up immediately near, and thus choking it. The leaves are egg-shaped, narrowing towards the stem. Compare with dandelion. The edge of the leaf is only slightly serrated. There are no deep notches like those of the dandelion. There is no true stalk to the leaves.

(iv) *The Root.*—Compare with the dandelion root, which it resembles. The "root-stock" is perennial, and forms new tufts of leaves and flowers each year. After fertilization (which may be effected by such small insects as flies) the one seed develops. Con-

trast the absence of hairy sepals with dandelion's wings.

ASSOCIATION. — Comparison with dandelion.

1. The daisy flowers are white and yellow.
The dandelion flowers are all yellow.
2. The daisy flower stalk is round, solid, downy, and contains a clear juice.
The dandelion flower stalk is round, hollow, smooth, and contains a milky juice which tastes bitter.
3. The leaves of the daisy are only slightly notched.

The leaves of the dandelion are very deeply cut.

4. The leaves of the daisy have no true stems.

The dandelion leaves have no true stems.

5. The seeds of the daisy have no wings, but are blown away by the wind.

The dandelion seeds have wings which are blown about by the wind.

FORMULATION. — "Solomon in all his glory was not arrayed like one of these."—*Luke*, xii. 22.

APPLICATION. — See correlated lessons

Phonetics

PART I.—*Breathing Exercises.* PART II.—*The Sound*

'blow'.

(i) After children have gone through a simple breathing exercise (see the Spring Scheme), teacher gives the following exercise in breath control. "Who can tell the time by this dandelion clock?" Holds up dandelion head of winged seeds. "How will you tell the time, Sam?" "I will blow — 'Pf, pf, pf!'" "What time is it, then?" "Three o'clock." "All blow three o'clock. . . . Blow five o'clock." Whatever o'clock they have to blow, children may only take in one full breath.

(ii) "Now let us build the word 'blow'." Teacher has "ow" printed on a card and produces it at the right time. Children print it on their boards, and then tell how the sound is made by the mouth. The mouth is open and lips form a round "o" — the very sound they are saying! Teacher

takes care that a good round sound is made. She lets the children repeat words containing this sound and suit actions to them, e.g. "I throw my ball." Children say "throw" and dramatize. "I sow seeds." "Boys grow." "I row on the river." "We mow the grass." This exercise is interesting and forms ample opportunity for the teacher to correct mispronunciation. Record: — Dandelion clock with winged seeds flying away; "blow" printed beneath.

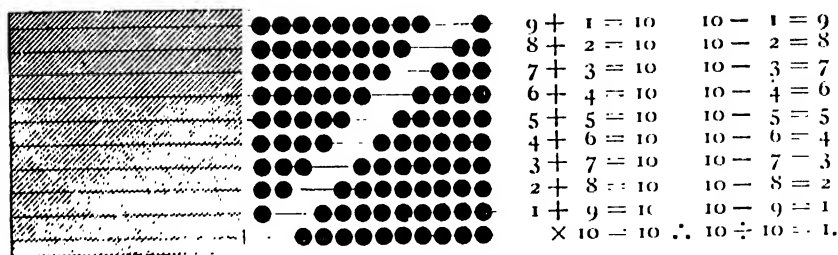
Sentences: "The dandelion says: 'I want to *sow* my seeds. Wind, *blow* my *own* seed-babies away. One has *flown*. The next will *follow*. They fly over the new-*mown* hay in the *hollow*. They fall *lower* and *lower*. Then they rest. I *know* they will *grow* into big dandelions like me. Will it be to-morrow?"

Number

Number 10 continued.

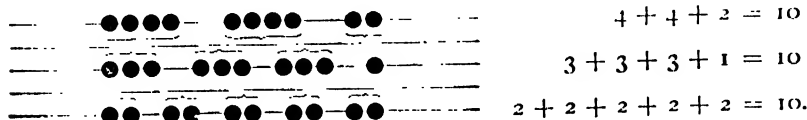
The use of the ball-frame provides an interesting change for this week's work. A further change is introduced if children

call the balls dandelions, daisies, &c. The following is reprinted from *Teacher's Black-board Arithmetic*, publishers Messrs Blackie.



$$2 \times 5 = 10 \therefore 10 \div 5 = 2$$

$$5 \times 2 = 10 \therefore 10 \div 2 = 5$$



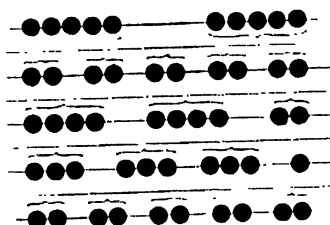
$$5 + 4 + 1 = 10$$

$$6 + 3 + 1 = 10$$

$$4 + 3 + 2 + 1 = 10$$

$$3 + 3 + 2 + 2 = 10$$

$$7 + 2 + 1 = 10$$



The half of ten is five.

The fifth of ten is two.

There are two fours in ten.

There are three threes in ten.

There are five twos in ten.

Story—DANDELION CITY

On the top of a tall dandelion stem stood Dandelion City. It was a wonderful place, where more than two hundred flower-children lived. These bright, yellow flower-children were so pretty that Mother Nature had built a wall all round them. This was a very strange wall; for at night, or when the days were dull, it would fold inside the city all the

dear dandelion children, and keep them safe from the cold and wet. It did not hurt them, because it was not built of stone and brick, but of soft, green bract-leaves. When morning came, or the sun shone, the wall of the city would fold back and let the golden light in. The wall was useful in another way. Sometimes great insect thieves would climb

A YEAR IN THE INFANT SCHOOL

up the dandelion stem and try to steal into Dandelion City; but they could not get past this tall bract wall, so jagged and pointed. Each of the flower-children had fine anther-boxes full of precious golden pollen dust. This was the treasure the insect robbers wanted to steal. There was something else besides: every flower-child had a drop of sweet-scented juice which the insects would have stolen had they got into Dandelion City.

One day there was a great commotion in the city, the dandelion flowers were talking to each other. "It is all very well," they said, "staying here and looking pretty, but we would rather fly away like the birds and be blown by the wind across the sky." "How delightful that would be!" cried one of the oldest children, who lived near the bract walls. "Let us ask the soft wind to blow us away!" So when the wind whispered round the city they asked her to take them in her arms and carry them out into the wide world. "You cannot fly," murmured the soft wind; "your wings have not grown." "When will they grow?" the flower-children asked anxiously. "When a baby seed comes in your cradle," replied the soft wind, and sailed away. The flower-children were surprised at what the wind had told them; they could not understand it in the least. "We will ask the soft wind to tell us more," they said. Next day, when the wind was singing all round Dandelion City, the children asked her how they might each grow a seed in their little cradle bed. "If you all want one so very much, you must buy one. Empty the golden treasure out of your pollen baskets," the soft wind told them. They did not like this, and cried: "But it will all be wasted!" "Very well," said the wind as she swept away from the city. When the wind had left them, some of the flower-children thought of the wonderful jobs they could make when they had grown, and each emptied his

treasure on the little fairy wand that was growing in the middle of the treasure boxes. Some of the others were selfish and wanted to keep their golden pollen, and they would have done had not a little bird flown by singing with joy.

Little by little the fairy wand pushed up through the flower dust. It was just like a brush, full of tiny hairs, so that when it peeped above the pollen boxes it was covered with yellow. "Now," said the flower-children, "our seeds will grow." "Not yet," said the soft wind; "wait patiently till the fairy wand divides at the top and Honey Bee visits you all. He will bring you golden treasures from another flower city, and you must give him some of yours in exchange. The minute you have done this your little seed cradles will begin to fill." The fairy wand divided as the wind had said, but no Honey Bee came that way. At night, when the green bract walls were closing the flower children in, they asked to be allowed to stay open a little longer, but in vain. "No!" whistled the night wind. "The bees have gone to rest long before this; wait another day." When the next day came the sun shone on Dandelion City until it glittered and glistened like gold. "Surely Honey Bee will come to-day," they said to each other; but all that day went by and not one bee paid a visit to Dandelion City. Then, "Dear wind," the flower-children begged, "tell us how to make our seeds grow. We have spent all our golden pollen money and our fairy wands have divided; what is needed yet?" "You have not bought a tiny seed until your golden pollen money is put on the counter at the end of the fairy wand." "How can we do that? We have no arms." "Be patient; wait and see what will happen," the soft wind hummed.

Something wonderful happened at last, for the two ends of the fairy wands began to curl downwards and downwards until

they touched the pollen which the fairy wand had brushed on its side when it pushed through the anther boxes. And now there was a great commotion in Dandelion City. Each little flower felt the stirring of its baby seed, and longed for the time when its wings should grow. The green bract walls closed round the city and hid it from sight. Something was happening inside there which no one must know.

One day the walls folded back and—what

a change! Each golden flower had withered away, and its seed cradle had grown larger. At the top of every seed cradle grew a long neck with many fine hairs spreading all round. "Are you ready?" called the soft wind. "I have come to carry you away. Puff! Puff!" and she blew gently with her sweet breath. "Goodbye, goodbye!" the dandelion children called to each other, and away they went sailing with their baby seeds far out into the wide world.

Another story:—"The Lark and the Daisy"—*Andersen's Favourite Fairy Tales* (Blackie's School and Home Library).

Song—"THE WEST WIND AND DAISY"

—*Teachers' Times*, Oct. 16, 1908.

Game—DANDELIONS AND DAISIES

Tune—"Oranges and Lemons".

Dan - de - lion has come to town, Dressed in her yel-low gown; Dai - sy, too, with eye so bright,
In her bon - net neat and white, Flow-ers, sweet, we children love you, Bright as gold-en stars a-bove you!
Dan - de - lions and dai - sies, We chil - dren sing your prais - e Now, if you please, 'tis time for bed,
Here, lit-tle clock, we blow off your head, One, two, three, four, poor old head,
Five, six, sev'n, eight, Time fo bed!

Directions. Two of the elder children are chosen to represent the dandelion and the daisy; if they wear wreaths of flowers will make the game pretty. The game is played as in "Oranges and Lemons", or "London Bridge is Broken Down". The two children face each other, and, holding hands above their heads, form an arch through which the remainder of the children pass in single file. At the words, "Now, if you please, 'tis time for bed", the procession moves through very slowly. The last child is caught, and has to choose between dandelions and daisies. When all the children are caught, a tug-of-war finishes the game.

Blackboard Reading and Drawing

Here is a Dandelion Family.

Sister Dandelion's hair is shining gold. Mother Dandelion's hair has turned white; she is so old. Poor old man Dandelion has no hair at all; the wind blew it off. Can you see his bald head?



Caterpillar climbed up to eat the golden curls on Sister Dandelion's head, but could not get past the green leaf collar she wears on her neck.



The Dandelion Family go to sleep when boys and girls are having their tea.

Here is a picture of Sister Dandelion asleep. Look how she has tucked all her hair away under her green night-cap.



On one dandelion head there are hundreds of flowers like this. Can you see the "fairy wand" with its two curls at the end? When the bee leaves some flower-dust on these ends a baby seed begins to grow.

After the dandelion has been closed, the flower is dead, but the seed cradle has grown big.

The wind blows, "Puff! Puff!" and the seed sails away. It is like a ship with a long thin mast and hair sails.



Can you tell the time by a dandelion 'clock'?

5. SUMMER FLOWERS

(See *The Buttercup*, page 132)

Object Lesson: "The Harebell"

MOTTO.—

" 'T was a lovely thought to mark the hours
By the opening and the folding flowers
That laugh to the summer's day."

Mrs. Hemans.

PREPARATION. —As one of the most delightful of spring flowers is the hyacinth, so one of summer's most graceful flowers is the harebell, or "Scottish blue bell". The wild hyacinth is called in England the blue bell. The harebell or blue bell is one of the poet's favourite flowers.

MATERIALS. —Complete plants of the harebell, pictures, &c.

PRESENTATION. —The harebell is one of the commonest of our summer flowers, and is always abundant "on swelling downs, where sweet air stirs the blue bells lightly".

Appearance. —Slender grass-like leaves on stem; roundish notched leaves at base; hanging head, so it protects itself against honey dealers.

Name. —Name given to plant means round-leaved bell-flower. Leaves easily seen on young plant often dry up later. There are several kinds of bell-flowers. The Ivy-leaved Bell-flower grows in moist woods in the South of England. First leaves oval with heart-shaped base. Never round.

ASSOCIATION. —Connect with heather and heath. Compare flowers with those of the thistle and other autumn flowers, with the flowers of the bramble.

FORMULATION.—

"This little flower that loves the lea
May well my simple emblem be.
It drinks heaven's dew as blithely as rose
That in the king's own garden grows."

APPLICATION. —Hand-and-eye exercises and the other correlated lessons.

Phonetics

Mechanics of production of throat letters. Production of "h". Production of name sound of "ā". Words beginning with "h's". Exercises on the use of "h", &c.

Number

The numbers that make up 10. The breaking up of 10 into its parts, &c.

Story

"The Story of the Daisy" (Hans Andersen).

Song—

"THE BLUE BELLS OF SCOTLAND"

Game—JACK AND JILL

Blackboard Reading and Drawing

"The Harebell", description of plant, using:

"E'en the slight harebell raised its head
Elastic from her airy tread."

Recitation

"Buttercups and Daisies" (Mary Howitt).

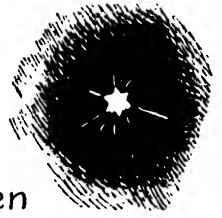
Sense Culture

Paper-cutting; a harebell. Paper-folding, &c.

Other lessons suggested: I. Forget-me not; II. Foxglove, &c.



I am a modest Daisy. This is the
of the night; I am the star of
the day. I shine all day
among the grasses with my
little white leaves. Then, when
the day passes, I close them one by one



All the children love me; the birds love
me too. My leaves grow all round my stem. They
press close to the ground, and keep the grass and
weeds from growing up and choking me.

My stem has many fine hairs on it. Do you know
why? There are hundreds of small yellow flowers in my bright eye
Here is a picture of one. What a long way the bee
must go for his honey! He cannot find it unless
he goes down to the top of the seed-box. Can you
find the seed box?"

Miss Daisy wears a white cap to make
(nectary) look pretty. Mr. Butterfly
likes Miss Daisy. When he sees her
white cap he flutters round. "Good-morning!"
he says. "Have you any honey for me?
You look sweet to-day with your golden
hair and dainty white cap." Miss Daisy blushes to hear
this. Have you seen her blush pink?



Gay Dandelion.



Miss Daisy tucked her hair away
 Beneath a bonnet, white and neat
 And butterflies and bees agreed,
 Miss Daisy Dill was dainty, sweet.

Young Dandelion pitied her;

"I would not hide my locks of yellow,"
 He cried, and shook his curly hair,
 So proud was he, the vain young fellow!



"Oh, Look!" cried Daisy
 Dill one day,

"Where is your hair so golden bright?"
 He looked and found - oh, what
 a shock!

His lovely locks were turned to white!



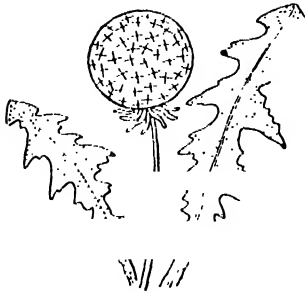
But this alas, was not the worst;

For vanity he had to pay,
 The wind had made his poor head bald,
 And carried all his hair away!



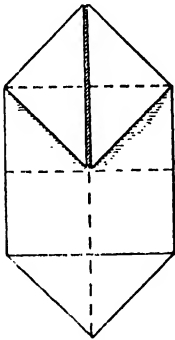
M.S.

**Paper Cutting - DANDELION
"CLOCK"**

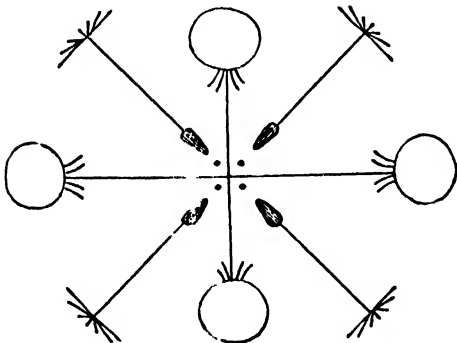


Head in white paper marked in crosses for the seed wings. Stem and leaves dark green.

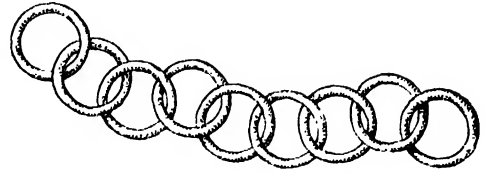
Paper Folding--ANOTHER CLOCK



**Free-arm Drawing--DESIGN BASED
ON DANDELION FRUIT**



Clay Modelling--"DAISY" CHAIN



Free rolling of clay should not be allowed. Sometimes it is necessary to have finger-rolling. On these occasions (the present exercise is one) special permission should be given.

Brush Work THE DAISY



Use dark or black paper. Paint the whole design in Chinese white, and, when dry, colour the stem and leaves green and the eye chrome yellow.

Chalk Drawing--DANDELION



Provide each child with one flower and leaf at least.

Object Lesson—THE BUTTERCUP

APPARATUS.—Provide each child with a buttercup and leaves. Have the complete plant on the table. Make enlarged drawings on blackboard.

PREPARATION.—The previous lesson was about a well-known flower; here is another equally familiar wild flower. The buttercup is so familiar, that children often ignore or despise it. Get them to tell where they find buttercups. Encourage them to talk freely about the flower. They will probably say the cow eats buttercups to make good butter! Some little ones play the game, "Do you like butter?" in which the answer is given by the reflection of the buttercup held under another child's chin. Such apparently trivial touches as these should not be despised by the teacher, as they help to make the lesson living and happily real to the little ones. Ask children to suggest the reason for the name.

PRESENTATION.—(a) **The Flower** consists of rings of *sepals*, *petals*, *stamens*, and *carpels* (seed vessels), all arranged on a receptacle.

The Sepals.—These are five in number, arranged in a ring; they are small downy green leaves, which form a kind of cup. Of what use are the hairs on the back of these tiny leaves? Allow the children to pull a sepal off and examine it.

The Corolla or *crown* consists of a ring of five bright-yellow leaf-like *petals*. They stand between the gaps left by the sepals, and are often arranged spirally. Let children describe how the petals wrap over each other slightly. The inside of the petals is shiny, like satin, while the outside is not. Get children to suggest the reason for this. There are fine veinings, or bee-paths, leading from the edge of the petal to the base. What will the children expect to find here? Let them pull one petal off very carefully. They will find a small pocket at the tip of the base. If they insert the end of a pin in this

pocket and then taste it, they will find it sweet. Why? The buttercup hides her honey in this little bag at the base of each petal.

The Stamens.—These are many in number. They form a series of rings on the inside of the petals. The stamens on the outside are riper than those near the centre. Let children put the tip of their finger in the cup and see the yellow pollen.

The Seedboxes.—These are in the centre of the flower; they are small and green. Each seed case contains one little body ready, after a visit from the bee, to grow into a seed.

(b) **The Leaves.**—Deeply cut into several divisions. The number of divisions varies. Shape is somewhat like the hand with fingers outspread. Contrast with leaves of dandelion and daisy. The veins run in a kind of network. Leaves have long hairy stalks. At the foot of each leaf stalk there is a leaf sheath.

(c) **The Root.**—Fibrous or bulbous according to kind of flower. (In this lesson it is advisable to keep distinctly to one kind of flower.) In the fibrous-rooted buttercup the stem forms creeping runners which are fixed to the soil, and the sepals spread outwards. In the bulbous flower the stems are quite erect, and the sepals bend back.

(d) **Fruit.**—There are many one-seeded vessels on the buttercup head. Show class a fertilized flower head with all the leaves withered off, but with enlarged seed cases.

ASSOCIATION.—Connect with daisy and dandelion wherever possible. (1) The flower of the buttercup is one colour, gold. The dandelion flower head is gold.

(2) There is only one flower on the buttercup head. There are hundreds of tiny flowers on the dandelion head.

(3) The fine hairy "cup leaves" bend back or spread out in the buttercup. Many smooth "cup leaves" are erect and many curve downwards in the dandelion.

(4) Stem of the buttercup downy, often furrowed, solid. Stem of the dandelion smooth, round, hollow.

(5) Leaf of the buttercup deeply cut and downy. Leaf of the dandelion deeply cut in curves and smooth.

(6) Buttercup root fibrous (or bulbous). In the former kind the leaves die down and a new stem grows out between the old ones. Dandelion root fibrous, and has a creeping stem like the buttercup. New stem and leaves grow out of axil of old leaves.

(7) The buttercup head bears many seeds, which have no wings. The dandelion head bears many winged seeds.

FORMULATION.

"But not alone the fairest flowers:
The merest grass
Along the roadside where we pass,
Lichen and moss and sturdy weed,
Tell of His love who sends the dew,
The rain and sunshine too,
To nourish one small seed."

—C. Rossetti.

APPLICATION.—The usual correlated lessons.

Phonetics

The Sound "ou" as in "ground".

Teacher shows a record drawing of buttercups and daisies growing out of the ground. Short chat on use of the ground as a cupboard for food, &c. Five children are called to the front, and as teacher touches each in turn they say the sounds which make the word. E.g. first child says "g", second "r", third "ou", &c. Teacher intones the sound "ou", lengthening out the first and second parts, e.g. "aa---oo---". The children then tell that the "ground ou" is made up of two sounds: "a" (as in "father") and "oo" (as in "goose"). Teacher contrasts it with the "blow ow" of last week, which was made up of one sound only. The children tell how, in singing the "blow ow", the lips keep in one position, but in the "ground ou" the lips, which are open wide at first, close into a smaller ring as if to clip off the end of the sound. Middle C is struck on the piano, and children sing it to the

sound "aa-oo". Teacher beats as for common time, four for "aa" and four beats for "oo". D, E, F, G, &c., are played and sung respectively. The children take a deep breath between each note. This exercise is considerably improved if someone is at the piano who can play a few simple chords as accompaniment.

"Now, children, 'go to sleep'. When you waken I will show you the 'ground ou'. Here it is. Look well at it. As there are other ways of printing the sound 'aa-oo' which you will have to learn, we will call this one the 'ground ou'."

Sentences: Daisy lives close to the ground. I found her with her round frill. She cannot shut her eye without it. Buttercup is proud. She holds her yellow cup hour by hour. The Butterfly flies round on account of the pollen. We bound up the mountain sides and fill our baskets. Hear the hound bark loudly

Number

Number 10 continued.

(i) "Clock figures" x and ix.

(ii) General exercise on number 10.

(i) When the children learned number 6, they saw that at first people could only count as far as 5—the figures on one hand. Later

on it grew necessary to count larger numbers than 5, and so people thought of the five fingers of the other hand. One more stroke was added to "v" for each finger till the last, which is ten, or double "v". The rough shape of both hands held together at the wrists made people take λ for their sign of ten. This has been changed very slightly to x. Ten (x) was now much easier to write than clumsy viiii, so the people thought that, as 9 was 1 less than 10, if they put i before the x it would be easier to write. That is why we have ix for nine. They adopted the same plan with iiii, and made it iv.

(ii) 5 buttercups with 2 bees buzzing round each flower. How many bees?

Two trees fell in a thunderstorm. They

were each cut up into 5 logs. How many logs altogether? Mrs. Brown got one for her fire. She said it would burn 10 hours. It only burned 3 hours short of 10 hours. How long was that? Mrs. Smith got a log too. Hers burned 2 hours less than Mrs. Brown's. How long did it burn? How many logs burned? How many fell? Mr. Jones bought half the rest. How many left?

A builder built 3 greenhouses. He put 3 shelves in one, 5 in another, and 2 in the third. How many shelves? How much would they cost at 1s. each?

Mother made some dandelion beer for her 3 sisters. She made 10 bottles. One sister got 4 and another sister got 3. How many did the third sister get?

Story—THE STORY OF A BUTTERCUP

A little seed lived in the ground. It was very lonely, but it was quite happy. All through the bright sunny days it listened to the trip, trip of the flower fairies as they danced far above it among the grass and flowers. The birds and insects knew about these fairies too, and had even seen them. Some boys and girls were fortunate enough to have seen them too, but only those the flower fairies loved. Whenever anyone came near, the fairies stopped their play and vanished, so that the few boys and girls who had seen them were lucky children.

The queen of the fairies used to come every day to the wood to hear what the flower fairies had to tell her, and to grant whatever they desired. She drove in a beautiful carriage, which was made of a large golden kingcup. Tiny flies were the horses, and their harness was made from webs of garden spiders which the fairies had caught floating in the air. This lovely car would fly through the air at a word from the fairy queen. She never used a whip, indeed she never needed one, and would not have known what to do with it.

The little seed stayed down in the dark all through the long days and nights. How it longed to peep into the world and watch the flower fairies at their play! "If the fairy queen knew how lonely it was down here, she would be sorry," the little seed thought. It was not often impatient; but one day, when the tiny elves were dancing round the fairy queen, it wished so much to see them, it nearly burst its little coat with trying. "Stop!" said the queen, whose voice sounded like the tinkling of a silver bell. The bluebells rang for silence. Such lovely music they made! It was a pity no one but the fairies could hear it! The dancing stopped. The fairies bent to hear what their queen had to say; but she did not say anything. She stepped out of her car and knelt with her pretty ear to the ground. "Who is wanting to speak to me?" she asked. The little seed could scarcely believe its ears. It answered: "It is I, a little seed." "Speak again and tell your heart's desire," said the queen in the sweetest voice. The little seed said in a whisper that it wanted to see the

great world above. "Your wish is granted; you shall grow to be a lovely flower," said the queen of the fairies; and she waved her wand over the seed's bed. Then she stepped back into her car, and the fairies danced until the wood rang with the music of their voices and the tinkling of their tiny feet.

The seed began to grow little by little, until one day it saw the glorious world for which it had so often longed. The fairy queen had said truly; the seed had grown

into a golden buttercup. It was so happy, that its face shone with joy. It glistened in the sunlight so much, that the old sun must have thought some of his own light had fallen down among the grass. This was not all. Sometimes the flower caught a glittering raindrop, and then the fairies would drink from its golden cup. Then, when the fairies danced round its tall green stem, no flower was so happy as this one in all the world.

Song—"BUTTERCUPS AND DAISIES"

—Words —M. Howitt. *Tune*—"Comin' through the Rye".

Game—BUTTERCUPS AND FAIRIES

1. Hap - py fair - ies trip - ping, Dan - cing in a

See us gai - ly

Ah! we hear a foot

Quick - ly

Fair

their play.

2. We are pretty flowers;

See us holding up,

Ready for the showers,

Each a golden cup.

When the lovely fairies

See the raindrops fall,

They will know quite well that there is drink for all.

Directions.—*Verse 1.* Some of the smaller girls kneel on the ground to imitate buttercups. Each child holds the palms of both hands together to catch the raindrops. Other children are the fairies, who dance lightly in a ring round the buttercups. When a boy comes walking along, each fairy jumps behind a flower to hide.

Verse 2. A few children in the distance clap their hands gently, to imitate the falling rain, whilst the flowers are singing this verse. After the shower the fairies step out and pretend to drink from the golden cups.

Blackboard Reading and Drawing



Do you know why I am called Buttercup?

The inside of my cup is like satin. When it is dark, I shut up my cup to keep the inside nice. I am very rich. In my cup there is some golden flower dust. I am sweet too. I have five tiny pockets



where I hide my honey. Mr. Bee can find them.

The honey paths on my yellow leaves tell him where to go. My leaves are green and deeply cut. Do you know why my stem is hairy? I will tell you my secret. It is to keep insect robbers from stealing the golden dust I told you about.



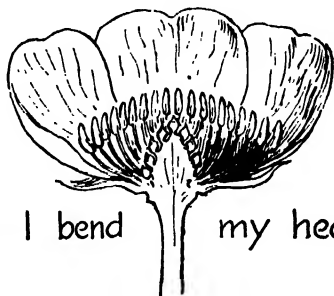
The tiny ring of green leaves on the back of the yellow cup are hairy too.

Mr. Bee is no robber; he gives me other pollen in exchange for mine.




Do you see my stem? It runs along underground sometimes.

Here is a buttercup cut in two. I wonder if you can find the bee-paths, the gold flower dust boxes, the seed cases, the yellow satin cup leaves and the hairy green ones. Sometimes when I want to play, I catch a tiny rain-drop in the cup on my head. Then I bend



my head

and let it roll out after its play-mates.

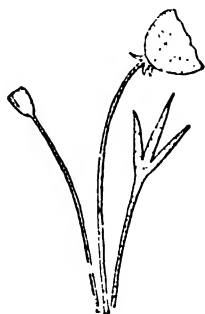


For flowers that bloom about our feet,
For tender grass so fresh and sweet;
For song of bird and hum of bee;
For all things fair we hear or see;
Father in Heaven, we thank Thee.

— R. W. Emerson

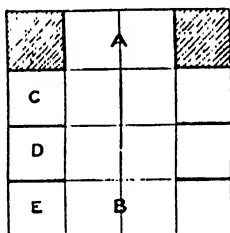
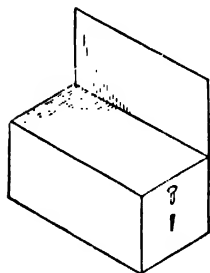
Other poems suitable for recitation:—1. "To the Celandine" W. Wordsworth. 2. "May Song"—Traditional. 3. "The City Child": Tennyson's *Child Songs*.

Paper Cutting—BUTTERCUP LEAF AND FLOWER



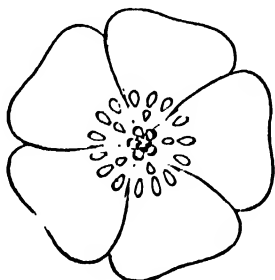
For the flower, cut a yellow half-circle. The edges of petals are then easily made.

Paper Modelling—SEAT IN "BUTTERCUP MEADOW"

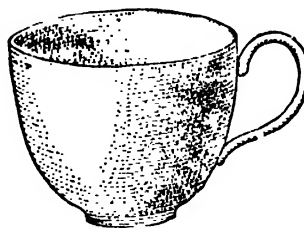


Fold as in X. Cut along thick lines. A is back of seat; B goes on the ground. When CDE are fastened together they form the side.

Free-arm Drawing—CONVENTIONAL BUTTERCUP HEAD



Clay Modelling—ANOTHER CUP

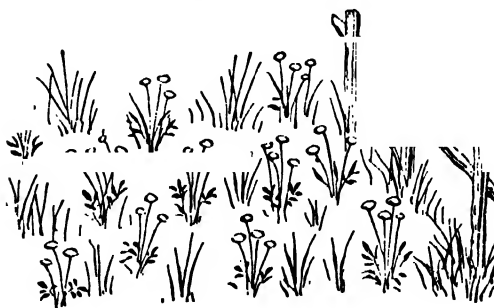


Break off small piece for the handle. Put ball of clay in hollow of left hand, and use the right thumb for hollowing. Work round between fingers and thumb to get thinner. Pinch out the "foot" of the cup. Roll handle between finger and thumb and affix.

Brush Work—BUTTERCUP DESIGN



Brown-paper Drawing—BUTTERCUP MEADOW



Light, thin, curved strokes for grass. Dots of yellow for the buttercups to be put in last.

Object Lesson—THE BEES

APPARATUS REQUIRED.—Pictures of bees and their hives. Specimens of real bees, honeycomb, and beeswax. Blackboard drawings of the bee, much enlarged. A number of sweetpea flowers to demonstrate action of stamens, &c., and some pansies.

PREPARATION.—Let the children talk about the bright colour of the dandelion and buttercup. Of what use was their colour? Why did the flowers welcome the visit of the bee? They wanted to have children to live after they were dead. After the bee had left pollen on the flowers the seeds began to grow; then the bright colours faded because their work was done. Get the children to describe how they have seen the bees flitting about from one flower to another, chiefly of the same kind, e.g. a bee after visiting a dandelion flower will fly about until it finds another dandelion.

PRESENTATION.—(a) **Why the Bee visits the Flower.**—(i) *To get the Honey.*—The bee pushes its trunk (long lower lip) down into the heart of the flower to get at the sweet juice or syrup. It sucks this up, and then flies to other flowers until it has as much honey as it wants. The under lip of the bee has a hairy tongue inside, and it is this tongue which brings up the honey. The bee does not eat this honey, but passes it into its honey-bag (first stomach). When it has collected enough honey, the bee flies home and pours it out into the cells of the hive. Some of this honey is used to feed the young bee grubs, and the remainder is stored for food during the winter.

Sometimes the bee does not empty the honey out of his bag, but allows it to stay there a day and a night. At the end of that time it has been turned (digested) into beeswax, which comes out of the bee's body on the under side. The worker bee uses this

wax to build his honeycombs. Show specimens of honeycomb, and tell children that the bee makes row after row of these little boxes or rooms. These rooms are used as storehouses for food.

(ii) *To get the Flower Dust.*—The bee's body is covered with hairs, which act like a brush in collecting a certain amount of pollen from every flower visited. When the bee has taken the sweet juice, it sets about securing the flower dust which has stuck to its hairy body. It brushes the pollen with its hairy hind legs and makes it into a small ball. With one hind leg and the aid of its long tongue the bee pushes this ball into the basket (a groove) on the inside of the other hind leg. When both hind-leg baskets are full, the bee, laden with pollen and honey, flies back to the hive.

Other bees, called nurse bees because of their work, take the pollen as the bee enters the hive. They knead it into lumps of bee bread, with which they feed the young bee children. The youngest baby bees of all are fed on bee jelly, which the nurse bees make from pollen and honey.

(b) **Why the Flower likes the Bee's Visit.**—Flowers live that they may have children. This cannot happen unless flower dust from another flower or itself settles in such a way that it can "grow downwards" into the seedbox. How can this be done? Some flowers pollinate themselves. (Refer to the dandelion with its curled stigmas.) Some wait for the bees or the flies to bring them pollen from other flowers of the same kind. Plants resulting from cross pollination are usually superior to the offspring of self-fertilized flowers.

Flowers are constructed as if to make sure that the bee shall pay his toll of pollen for the honey he takes. In the case of the

pansy, there are hairy projections on some of the petals to prevent the insect getting at the honey from those "paths". There are certain roads for the bee to travel along which necessitate the leaving of pre-gathered pollen as well as the collecting of new. In some flowers, such as the sweetpea, the very act of the bee in thrusting his trunk towards the nectary exposes the stigma. In the case of the sweetpea, the beak on the top of the pod (seed case) comes into contact with the pollen on the bee's body, and at once the ovules begin to develop into seeds. Here the teacher can show the children where the sweet juice of the pea blossom is hidden. By pushing the point of a pencil towards it, in imitation of the bee's trunk, she can show how the "hood" petal flies back and uncovers the stamens and stigma. If possible, let the children try this experiment for themselves.

(c) **What the Flower does to attract the Bee.**—Let the children say which flowers they like the best, and get the reason for their choice. This will probably be because they are pretty. The bee likes flowers which have a pretty colour, such as the dandelion and daisy. But some flowers are quiet and often unattractive in appearance. Have these to be neglected? The tameness of colour is often fully made up for by a lovely scent. The sweetness or strength of a flower's odour is as attractive to insects as bright colours. Ask children to name some of these flowers, and let them tell how mignonette and wallflower will scent a whole garden or room.

(d) **Beehives and their Members.**—The hive is the home for hundreds of bees. The queen bee, which is the mother of all the young bees, is the head of the hive, and its ruler. There is only one queen in each hive. When a new queen is born, the old one flies out with her followers in a swarm and settles in another hive.

The working bees are always busy. Some go out to gather food for the young and a store for the winter, while others stay at home and act as nurses, feeding and taking care of the young. Working bees do not like to be interrupted in their work, and will sting anyone who interferes with them. The sting is a thin needle-like tube with a poison bag at one end. The bee makes a puncture with the sharp "pricker", and the poison runs down the tube into the hole.

There are some bees—drones—who will not work at all. When they are only a few weeks old these drones are driven out or killed by the worker bees.

The honeycomb consists of rows and rows of six-sided little boxes in which the bees store their honey and the queen lays her eggs.

(e) **The Bee Itself.**—The body is in three parts. The head has two compound eyes and a long lower lip. The middle part of the body has the wings and three pairs of legs. The wings, two on each side, are locked together when the bee flies. The legs are made of several parts jointed together. The hind pair are longer than the others, but all are covered with stiff hairs. There is a groove on the inner side of each hind leg, which serves as a receptacle for pollen.

ASSOCIATION.—Compare with the work of Father, who goes out to work in order to provide food for the children, and Mother, who cooks the food, nurses the little ones, and keeps the home clean.

FORMULATION.—

"Bees in a hive
Are up and alive—

Lazy folks never can prosper or thrive.

"Merrily singing,
Busily winging,

Industry ever its own reward bringing."

APPLICATION.—See "Blackboard Drawings" and "Kindergarten Occupations".

Phonetics

PART I.—*Exercises in Breath Control.* PART II.—*The Sound 'oi'*

(i) "See this picture of a beehive. Do you see all the bees? They are in a big swarm. Who has heard them? What do they sing?" Children sing, "Z-z-z-z". They must breathe deeply before they begin, and, to lend interest, they twirl their fingers about in imitation of the tiny workers. If children are told they may only take one breath for each song, they will make the most of it.

(ii) "What busy creatures bees are! They toil all day long. Who toils at home? Where does Father toil? Why does he toil hard? The bee toils for the baby bees too. What kind of toil is your father's, Nellie? Building? Let us pretend to build. What kind of toil is the bees?" &c. "You shall each pretend to toil at something. Now let

us build 'toil'." Children tell "t" is the first sound and "oi" the next. Teacher says "oi" slowly, so that children may hear clearly that the first part of the sound is "o" (as in "got") and the second "i" (as in "hit"). Children repeat the sound. The symbols are shown on one card, and children print "oi" on their boards. They tell the last sound is "l", and the word is completed. Children turn "toil" into "soil", "boil", "foil". Teacher corrects any mispronunciation, such as "bile", "file", &c.

Sentences: Buzz Fuzz is a bee. Can you hear his voice? He makes a jolly noise. All the bees join in. Buzz Fuzz toils all day. He will not spoil the flowers. On the petals the tiny roads point the way to the honey. Buzz Fuzz does not soil them.

Number

Number 10.

General Exercises.

(i) "There were 2 violas, 4 wallflowers, and 4 geraniums growing in a garden. How many flowers was that? They were all waiting for the bees to visit them. A bee flew to the 4 wallflowers, but left the others alone. How many still waiting for the bees?"

"At last the bees paid them a visit. Then their pretty coloured leaves began to fade, 6 of the flowers died one day. How many left?"

"The scarlet geraniums had 5 bright petals each. How many petals had 2 geraniums together? One-half of these petals fell. How many left?"

"After the bees' visit, the seeds in the wallflower pods began to grow. The wind blew 10 of them about, and carried them

towards an old wall. 5 seeds fell in another garden. How many reached the wall? Next spring 2 flower stalks grew from each seed in the wall. How many flower stalks altogether?"

(ii) "Farmer Jones keeps bees. He has 4 hives on one bench in the garden, 3 on another, and 3 on a third bench. How many hives altogether?"

"Farmer Jones' bees flew about the orchard. One bee visited two trees. It sipped the honey from 10 sweet apple blossoms; 7 blossoms on one tree, how many blossoms on the other?"

"Mrs. Jones bottled some honey last year. There were 2 bottles of clover and 8 bottles of heather honey. How many altogether? She gave 4 bottles to her sister who lives in the town. How many left?"

"Every working bee has a groove in each

of its pair of long back legs. How many grooves will 5 bees have altogether? The grooves are like baskets for packing pollen inside. If 1 groove holds enough pollen to make one roll of bee bread for the grubs, how many rolls can be made if 5 bees have their hind legs full of pollen?

"Ten bees worked in the garden all

morning, then they flew home to their hive. Half of them went to give their honey to their baby bee grubs, the other half went to the top of the hive to make beeswax. How many fed the babies? How many hung quietly making wax? Ten cells—one-fifth are empty. The rest have bee grubs in them. How many cells with grubs?"

Story—THE BUTTERFLY'S PARTY

There was a great stir in Insect Land, because Mrs. Butterfly was giving a party. Everyone was invited. Insects which creep and insects which fly were all asked to be there. There was to be a grand feast at dusk, followed by music and games. Then there were to be races and all sorts of clever performances. What a fuss and flutter there was as the time drew near! Everybody put on his or her best clothes and tried to look handsomer than everybody else. Miss Moth, dusting herself with gold, thought she was far prettier than Mr. Butterfly, who was practising the bow and flutter with which he meant to greet his guests; and Mr. Tiger Beetle thought he was a fine young fellow beside Old Garden Spider. The party was to be held on a smooth lawn near a wood. Mr. Butterfly had chosen this place because of a large oak tree which offered shelter in case of wet weather. Happily for all the little insects, there was not a sign of rain. The sky was clear when the moon lit her silver lamp. When it was ready she turned her light on the lawn and made every leaf and blade of grass glisten.

At last it was time for the party to commence, and the guests began to arrive. First came Mr. Tiger Beetle, who looked very fierce. He quite expected to carry off the prize Mr. Butterfly offered for the running race. Next came the Gnat family, with Mr. and Mrs. Dragon-fly. Miss Moth, after

spending much time in getting ready, now put in an appearance. Next, young Wasp with his friends came flying on the scene. As he had promised not to sting, the other guests felt quite comfortable. Sly Mr. Dormouse crept out of his hole and led his blind brother, the Mole, to the feast. What a chirping and buzzing, and fluttering and humming there was when at last all the other guests had arrived! Mr. Butterfly felt very proud indeed as he passed in and out among his guests.

When the dusk gathered, the feast began. It was quite a funny dinner, spread out on a mushroom which was used for a table and for a cloth the insects used a dock leaf. The strangest thing about this party was that each guest had to bring his own food. Mr. Butterfly had made this clear when he sent out the invitations. He knew quite well that he could not please all his guests with the same supper. The feast would have been just perfect if the diners had not been startled every now and then by large nutshells which dropped from overhead. Mr. Squirrel, up in the oak tree, was having a feast of his own as he sat eating his acorns and watching the fun below.

When the supper was over, the racing began. After that the spider came out to show his skill on the tightrope. From one branch to another he slung his cobweb, then, quick as an arrow, he darted along.

"But, just in the middle, oh! shocking to tell!
From his rope, in an instant, poor Harlequin fell;
Yet he touched not the ground, but, with talons
outspread,
Hung suspended in air at the end of a thread.

"Then the Grasshopper came, with a jerk and a
spring;
Very long was his leg, though but short was his
wing;
He took but three leaps, and was soon out of
sight,
Then chirped his own praises the rest of the
night.

"With steps quite majestic the Snail did advance,
And promised the gazers a minuet to dance;

But they all laughed so loud, that he pulled in
his head,
And went in his own little chamber to bed."

By this time the night was growing very
dark, and the mother insects began calling
their young ones together. It was quite
time for bed, they said, and although merry-
making was jolly, yet little insect children
should go to sleep when the flowers closed.
They all said good night to Mr. Butterfly,
who was feeling very tired but was flutter-
ing with pride. Then, guided by the light
of their watchman, the Glowworm, they
went safely away to their separate homes.

--Adapted from "The Butterfly's Ball", by Wm. Roscoe,
in Book III, *Blackie's Model Readers*.

Other stories: 1. "Legend of Rhæcus"—Poem by J. R. Lowell. 2. Adapt story of "King Solomon
and the Bees".

Song—"SONG OF THE BEE"

Boston Songs and Games (Curwen).

Game—THE BEES

Tune and words of verses 2 and 3 from "The Bee"
game in Book I of *Blackie's Model Readers*.



2. Zoom, zoom, zoom! sing the bees all day
In the garden bright and sunny,
Buzzing, sipping, making honey.
Zoom, zoom, zoom! Hard at work are they.

3. Zoom, zoom, zoom! How they love the light!
All day long they work in clover,
Then fly home when work is over.
Zoom, zoom, zoom! They are out of sight.

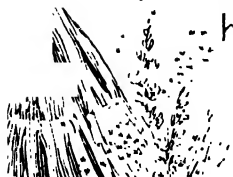
Directions.—*Verse 1.* Seven or eight children form a ring for the hive by holding hands, except at one point, the door of the hive. Inside, the working bees are humming and getting ready to fly out. This verse is sung by the hive children.

Verse 2. The bees leave the hive and fly into the garden, which is represented by children who pretend to be flowers. The workers buzz about from flower to flower, and use their fingers as the bees use their trunks. Garden-children sing this verse.

Verse 3. All the children sing verse 3, and the bees fly back to the hive, taking care to reach it before the words of the last line.

Blackboard Reading and Drawing

Here is a bee-hive. The farmer has put it in this lovely garden, so that his bees will not have far to seek for their honey. See the workers coming home laden with their flower-dust and honey.



Here is a worker.



Can

you find his eyes?

Some bees

will not work; they are called drones.

The working bees drive them away, or kill them. Look at



this busy bee. See him suck the honey from the sweet-pea flower. His hairy body will soon be all over with pollen. He will brush it off with his back legs. Can you see



the brush on this leg?



Do

not stop this bee from

working

or you will make him angry; then he will sting

you.

Try to find the poison bag on this picture.

The bee's sting

has a sharper point than a fine needle.

See the bee's sucking tube.

With this

long tube

he can reach the honey box of any flower.

Do you like honey?



bees feed them

Baby bees do,

Their nurse-

honey and

with bee jelly

made from

pollen.



"Little bee, come here and say
What you're doing all the day."
"Oh, every day and all day long
Among the flowers you hear my song.

I creep in every bud
I see;
And all the honey
is for me.

I take it to the
hive with care,
And give it to my
brothers there—

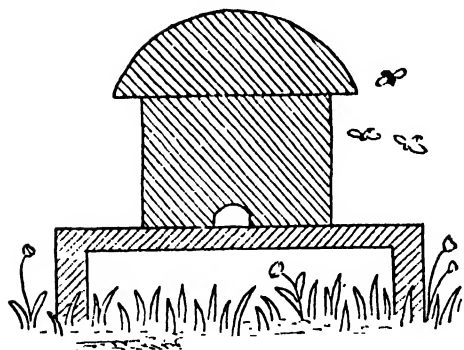


That, when the winter-time
comes on,
And all the flowers are
dead and gone,
And the wild wind is cold
and rough,
The busy bees may have
enough"



- Other poems suitable for recitation:—1. "What the Bee Said"—*Blackie's Model Readers*, Book III.
2. "The Wasp and the Bee"—M. Riach's *Recitations for Infant Schools* (Blackie). 3. "Suppose"—A. Carey
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Paper Cutting—BEEHIVE



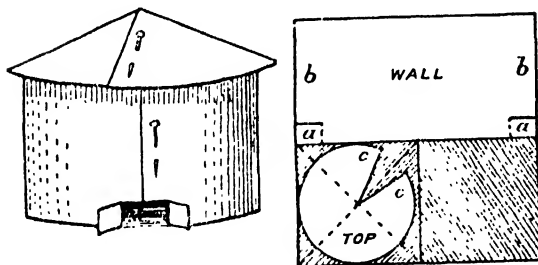
Hive, yellow; stand, brown; grass, green; flowers, as desired; bees, brown.

Clay Modelling—HONEY JAR



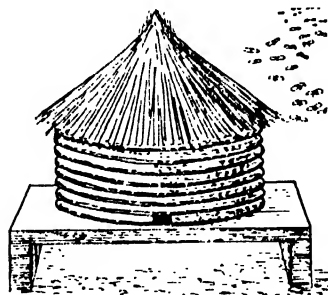
Make a ball, then cylinder. This is one of the cases where rolling may be allowed. Roll between palm of hand and board. Tap the two ends to make flat. If a piece of thread is tied on the top of jar, and a paper label fastened on the front, the result will delight the children.

Paper Modelling—BEEHIVE



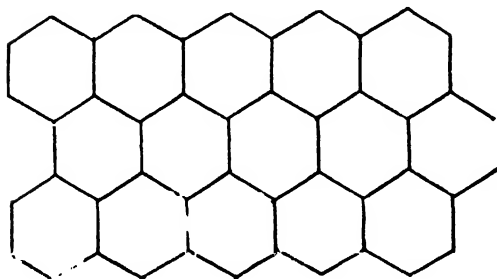
Slit the door, *a*, and fold back along dotted line. Pin *b*, *b* together. For the top, pin *c*, *c* together.

Brush Work—BEEHIVE

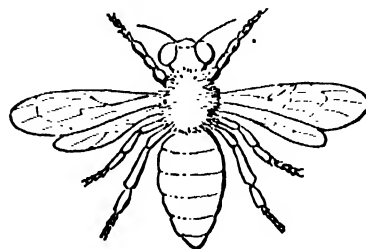


Wall of hive and the top should be done in yellow. Then, when dry, paint lines and heavier straw markings in brown madder. Stand and bees in brown.

Free-arm Drawing—HONEYCOMB



Chalk Drawing—THE BEE



Object Lesson—IN THE COUNTRY

APPARATUS REQUIRED.—Pictures of hay-field, farmyard, country lanes, and any scenes the children may bring to school. Models of rake, scythe, hayfork, and milking stool. (If possible, actual illustrations should be used instead of models.)

PREPARATION.—The lessons on the trees, dandelion, and buttercup will have made the children see hidden beauties and hear some of Nature's secrets. If the specimens have been unlimited, if the leaves, flowers, and plants have been abundant, the teacher cannot have failed to create an atmosphere of the country in the classroom.

PRESENTATION.—(a) **The Beauties of the Country.**—Let children talk about the green fields and the games they can play there; how they made daisy chains, and told the time by dandelion "clocks". The air is clear and free from smoke. Why? Show that, however lovely a place may be, when many men begin to work together the green fields are used as sites for houses. Trees are cut down, and chimneys grow in their place. The grass in the country is fresh and green, and the flowers sweet and numerous.

(b) **The Sounds of the Country.**—Children will remember the song of the birds, the lowing of cattle, bleating of sheep and lambs, humming of bees, and the music of the running brook. Contrast these with the noise of the motor-car hooter, factory horn, or the whistle and whizz of the tram-car. The sounds of the country are peaceful and happy, because there life is perfect.

(c) **The Value of the Country.**—It is useful as a health resort. Show the children that the health-giving value of the country is due largely to its quiet and peacefulness, its very oppositeness to the town stir and bustle. There are no workshops which pour clouds of dust and smoke from their chim-

neys. There are no crowded buildings with stuffy, unhealthy atmospheres; all is fresh and pure.

The country is useful for growing the corn for food, for pasturing the cattle for meat and for the supply of dairy produce. Timber and fruit are also produced.

(d) **The Farmhouse.**—This is the centre of by far the most important work carried on in the country. The farmer attends to the cultivation of the land, the sowing and reaping, mowing and stacking. He cares for the cattle and sheep, sheltering them when the weather is wild, and tending them when they are ill. (Mention the sheep-shearing, which was described in first lesson of this period.)

The farmer's wife tends the young on the farm. She makes food for the calves, boils rice for the young chicks, and takes under her special care any motherless creature of the farmstead. She, with her assistants, often milks the cows, and makes the cheese and butter. The farmer's wife prepares the meals for the men at work on the farm. Such seasons as haymaking time and corn harvests are especially busy ones for her.

(e) **The Farmyard.**—Let children describe the animals to be seen in the yard. Show picture. The little chicks run over the cobbles round and about the hoofs of the horse, who is drinking water from a stone trough. The cows are standing about waiting to be milked, and the sheep-dog sleeps in the sun. The cock struts about near the pig sty, prouder even than the old sow, who has a litter of busily eating, greedy piggies. An old-fashioned pump, a stone bench by the door, a barn, and stables all make up a picture of a typical farmyard.

(f) **Haymaking.**—Hay is used to supply food for cattle during the bleak winter months, when there is little or no grass to be had.

The grass is cut down with a mowing machine and left to dry. Show picture of mowing here. For meadows whose surfaces are uneven, e.g. when there are hollows and hillocks, the farmer uses a scythe. Show a real one, or draw on blackboard. The grass is left to dry. When the sun has warmed and dried it, the haymakers rake it together, first in rows and then in small heaps. The hay is turned and tossed with a two-pronged fork. Show one, or draw it. The farmer is pleased to have children toss and tumble in the hay; they help to dry it. When all is thoroughly dry, it is carted away. Show a picture of the hay wagon, and let children describe the lowness of it. They will be able to tell how one man stands on the cart, settling the hay, while others hand up the hay on the end of their forks. The

stacking comes next. Show how the hay is arranged neatly and the stack sides bound; why? This is to prevent loss from looseness or untidiness. The children will quickly see that strong winds would soon rob a haystack of wisp after wisp of hay unless great care were taken in the building of the stack.

ASSOCIATION.—The best association will be continual reference to the coming holidays.

FORMULATION.—

“Before green apples blush,
Before green nuts embrown,
Why, one day in the country
Is worth a month in town;
Is worth a day and a year
Of the dusty, musty, lag-last fashion
That days drone elsewhere.”

—Christina Rossetti.

APPLICATION.—See “Kindergarten Occupations”.

Phonetics

PART I.—*Exercises in Tone Control and Expression.* PART II.—*The*

(i) “Here we are at the farm. We will walk through the farmyard. See the little chickens—tiny, fluffy things! They are trying to find food for themselves. ‘Peep, peep!’ they say with their wee voices.” Children imitate with weak, quavering voices. At the same time they scratch on their knees with fingers. “Did you hear that motor horn? Mrs. Hen heard it. She is frightened for her chickens; she thinks they will be killed. ‘Cluck, cluck!’ she cries wildly.” Children copy the call, and use their arms for hen’s fluttering wings. “Now to the shippen. It is milking time. Can you hear the milk squirting into the pails? ‘Swish, swish, swish!’ the cans will soon be full.” Children sit as if holding cans between their knees. With each motion of their hands they whisper “swish!” lengthening out the “sh” at the end. “‘Moo-oo,’ says Mollie, and swings her tail. ‘I want to get out in

the fields again.’” Children imitate. Here is a good exercise for getting a round pure vowel sound. “What is the matter with Mrs. Hen? She has laid an egg, and calls to Mr. Cock. ‘Very good,’ he says, ‘I will tell everybody. Cock-a-doodle-doo!’” Children imitate. Another exercise in the long “oo” sound.

(ii) “Old Tray, the sheep-dog, thinks ‘What a fuss! Bow-ow! Bow-ow!’” Teacher introduces the “ow” sound by any new device. She compares the sound with the “ground ou” sound, and tells children that this “ow” is the “cow ow”. Record: Picture of cow labelled *cow*.

Sentences: One *cow* is *brown*. They *crowd* in the shippen. The *owls* are being fed *now*. How hungry they are! So is the *sow*. Tray says “*Bow-ow!*” He will not allow the sheep to *stray*. He is not a *coward*. Go *down*; he will not *howl*.

Number

Number 11.

Children work the following exercises with concrete objects. Teacher introduces them with little chat on the country, and gives names of animals, farmyard and haymaking implements, to the numbers. A specimen question is given at the beginning of each series. For division of 11 by 2 see treatment of number 7 (10th week, Spring Period).

(a) Sidney and Percy were helping to make hay. Sidney made 11 haycocks, Percy 11 all but 2. How many did Percy make?

$$\begin{array}{ll}
 10 + 1 = 11 & 9 + 2 = 11 \\
 1 + 10 = 11 & 2 + 9 = 11 \\
 11 - 1 = 10 & 11 - 2 = 9 \\
 11 - 10 = 1 & 11 - 9 = 2 \\
 8 + 3 = 11 & 7 + 4 = 11 \\
 3 + 8 = 11 & 4 + 7 = 11 \\
 11 - 3 = 8 & 11 - 4 = 7 \\
 11 - 8 = 3 & 11 - 7 = 4 \\
 6 + 5 = 11 & \\
 5 + 6 = 11 & \\
 11 - 5 = 6 & \\
 11 - 6 = 5 &
 \end{array}$$

(b) How many haymakers? 2 in one field, 3 in another, and 6 in the third.

$$\begin{array}{l}
 \left. \begin{array}{l} 2 + 3 + 6 \\ 3 + 6 + 2 \\ 6 + 2 + 3 \\ 6 + 3 + 2 \\ 3 + 2 + 6 \\ 2 + 6 + 3 \end{array} \right\} = 11 \\
 \begin{array}{l} 5 + 4 + 2 \\ 4 + 2 + 5 \\ 2 + 5 + 4 \\ 2 + 4 + 5 \\ 4 + 5 + 2 \\ 5 + 2 + 4 \end{array}
 \end{array}$$

(c) 11 hayrakes in the hayloft. How many haymakers can take 1 each?

$$\begin{array}{lll}
 11 \div 1 = & 1 & = 11 \\
 11 = & 11 & = 11
 \end{array}$$

(d) Farmer Jackson paid a haymaker 11d. for working 2 hours. How much is that for 1 hour?

$$\begin{array}{l}
 11d. \div 2 = 5\frac{1}{2}d. \\
 5\frac{1}{2}d. \times 2 = 11d.
 \end{array}$$

Story—FARMER ROGER'S GOAT

Farmer Roger had always been unlucky with his goats. He lost them all, and always in the same way. Some fine day they snapped their cords, and ran off into the hills, and there the wolf ate them. Nothing kept them at home—neither their master's kindness nor fear of the wolf. The self-willed creatures would have open air and freedom at any price.

However, Farmer Roger did not give up all hope; and, after having lost six goats in the same way, he bought a seventh. This time he was careful to get it when it was quite young, so that it might become used

to living with him. Ah, how pretty she was, this little goat of Farmer Roger's! She had soft eyes and tufted beard, shiny black feet, curly horns, and long white hair that clothed her like a cloak! Besides, she was gentle and loving, allowed herself to be milked without moving, without kicking over the pail. A charming little goat!

Behind the house there was a field enclosed by a hawthorn hedge. This was where Farmer Roger put his new pet. He tied her to a stake in the greenest part of the meadow, giving her plenty of rope and coming from time to time to see that she

was safe. The goat felt very happy, and cropped the grass with so much relish that Farmer Roger was delighted. "At last," thought the poor man, "here's a goat that won't feel dull and miserable."

But he was mistaken; the goat grew very tired of it all. One day, as she looked up at the hills, she said to herself: "How delightful it must be up there! How pleasant to skip among the heather, without this wretched cord to scrape against one's neck! A field is all very well for an ox or an ass to browse in; goats want more space." From that moment the grass in her field seemed tasteless. She was very unhappy. She grew thin, and her milk became less and less. It was pitiful to see her straining all day long at her cord, her head turned towards the hills, her nostrils quivering, her mouth uttering a mournful "Baa!" Then Farmer Roger saw too well that something was the matter, but he did not know what.

One morning, as he finished milking, the goat turned to him, and said, in her own tongue: "Listen, Farmer Roger! I am pining away in your field; let me go to the hills." "Dear, dear, she's like the rest!" cried poor Farmer Roger in amazement, letting his pail fall with a crash. Then, sitting down on the grass beside the goat, he began:

"What, little White-coat, you want to leave me?"

"Yes, master, please."

"Isn't there grass enough for you here?"

"Oh, it's not that, master!"

"Perhaps you haven't room enough; would you like me to lengthen your cord?"

"Tis not worth the trouble, master."

"Then, what *do* you want? What *would* you like?"

"I want to go up into the hills, master."

"But, you silly thing, don't you know that the wolf is on the hillside? What will you do if he comes?"

"I will butt him with my horns, master."

"The wolf will laugh at you and your horns. He has eaten goats of mine with stronger horns than yours. There was poor old Nanny, I remember—the goat I had last year—a terrible goat, as strong and spiteful as a buck. Well, she fought with the wolf all one long night—and in the morning the wolf ate her."

"Poor thing! Poor Nanny! That makes no difference to me, master; let me go up into the hills."

"Mercy on me!" said Farmer Roger; "what in the world is it that comes over my goats? Here's one more for the wolf to eat. No, no; I will save you in spite of yourself, silly thing; and for fear you break your cord, I'll shut you up in the stable, and there you shall always stay." Thereupon Farmer Roger carried the goat to a gloomy stable, and shut and bolted the door. Unluckily he forgot the window, and hardly had he turned his back when the goat skipped out and fled.

When White-coat arrived on the hillside, great was the excitement there. Never had the old fir trees seen anything so pretty. She was welcomed as a little queen. The chestnuts bent to the ground to caress her with the ends of their long branches. The golden gorse opened to let her pass, and gave out its finest fragrance. The whole hillside made holiday for her. How happy the little white goat was! There was no cord now, no stake, nothing to prevent her from skipping about and grazing where she pleased. And the grass!—it grew higher than the tips of her horns. And such grass!—scented and tasty and fine, very different stuff from the turf in the field. And the flowers!—tall blue hyacinths, purple fox-gloves with their deep bells, a whole wilderness of flowers brimming over with refreshing juices.

White-coat rolled about with her legs in

the air, stirring up the thick layers of leaves and twigs. Then with one bound she was on her feet again. Hey! There she was, romping away headlong through the thicket and brushwood, now on a hillock, now at the bottom of a ravine, up, down, everywhere! You would almost have thought there were ten white goats on the hillside. She was not a bit afraid, was White-coat! She sprang at one bound across wide brooks that splashed her with spray as she passed. Then, all dripping, she stretched herself on some flat rock, and dried herself in the sunbeams.

Once, approaching the edge, with a laburnum blossom between her teeth, she looked over, and there, far, far below in the plain, was her master's house with the field behind. She laughed till the tears came. "How small it is!" she said. "How could I ever have found room in it?" Poor thing! she fancied that she was as big as the world itself, now that she was perched up so high. Yes, that was a happy day for Farmer Roger's goat! Towards noon, running this way and that, she fell plump into the midst of a herd of chamois greedily cropping a wild vine. The white-coated little frisker caused quite a sensation. She was given the best place at the vine, and the big-horned animals were most attentive to her.

All at once the wind blew cold. A purple shade crept over the mountain. It was night. "Already!" said the little goat, and she stood stockstill in astonishment. Below, the fields were covered with mist. Farmer Roger's field was disappearing in the haze, and nothing of the cottage could be seen except the red roof and a wisp of smoke. White-coat heard the tinkling bells of a flock of sheep on the way home, and she felt suddenly miserable. A hawk, returning to his nest, brushed her with his wings. She shivered. Then came a howl across the mountain—"Hoo! hoo!"

She thought of the wolf; all day the foolish thing had forgotten him. At the same time a horn sounded far down in the valley. Good Farmer Roger was making a last effort to call her home.

"Hoo! hoo!" howled the wolf.

"Come home! come home!" shrilled the horn.

White-coat half-wished to go back; but when she remembered the stake and cord, and the hedge round the field, she thought that she could never again endure the life there, and it was best to stay where she was. The echoes of the horn died away. White-coat heard behind her a rustle in the leaves. She turned, and in the dark saw two short ears, standing straight up, with two glaring eyes between. It was the wolf!

Silent and still the huge creature sat there, gloating upon the little white goat, and already licking his lips. Knowing that he was going to eat her, he was in no hurry; but when she turned he began to grin wickedly. "Ha, ha! Farmer Roger's little goat!" he said, and he passed his great red tongue over his velvety lips. White-coat felt that she was lost. For a moment, recalling the story of old Nanny, who had fought all night, only to be eaten in the morning, she said to herself: "Perhaps I had better let myself be eaten at once." Then, on second thoughts, she stood on guard, with head lowered and horns stuck out—brave little goat that she was! Not that she had any hope of killing the wolf. Goats do not kill wolves. But it was just to see if she could hold her own as long as Nanny.

Then the huge beast drew near, and the little horns came into play. Brave little goat! how hard she fought! Ten times she forced the wolf to draw back to recover his breath. During these minutes of truce, the hungry goat hastily cropped a blade of her fine-scented grass, then returned to the fight

with her mouth full. So it went on, all night long. From time to time Farmer Roger's goat looked up at the stars twinkling in the clear sky, and said to herself: "Oh, if I can only hold out till dawn!"

One after another the stars went out. White-coat struck still harder with her horns, the wolf snapped still more fiercely with his teeth. A pale glow appeared on

the horizon. The hoarse crow of a cock came from a distant farmyard below. "At last!" said the poor creature. She had been waiting only for the daylight; and she stretched herself full length on the ground, her fair white coat all stained with blood.

Then the wolf sprang on the little goat and devoured her.

—Alphonse Daudet, in *Blackie's Model Readers*.

Songs—1. "THE FARMYARD"

—*Peeps at Playtime* (Charles and Dible).

2. "A SUMMER SONG"

—Book II, *Blackie's Model Readers*.

Game HAYTIME

—From Song in Book I of *Blackie's Model Readers*.

1. C_o With shout, And

toss and tu hay; et and

good to eat, This sum - mer day.

2. The farmer's kind,
And will not mind
However much we play;
So come along,
With shout and song,
And help him make the hay.

Directions.—*Verse 1.* The children trip out in twos whilst teacher plays the piano. When all are arranged they pretend to make the hay. The raking movement should be easy and rhythmic, all the hay-makers moving together.

Verse 2. If teacher wishes, the movements for this verse may be quite free, each child doing as he or she wishes.

Blackboard Reading and Drawing

Hurrah! The holidays will soon be here. Tom and Nelly Jones are going into the country for their summer holidays. Tom will help the men to make the hay.



The farmer has a mowing machine with which he cuts the grass.

He cuts the grass with a scythe in places where the machine cannot go.



See Tom losing the hay with a rake. Nelly helps too with the hay-fork. How hot it is in the hay-field! The men would rest, but the farmer says; "Make hay while the sun shines." When the grass is quite dry it is carted away. The wagon is loaded. Tom and Nell will ride on the top. Away they go to the barn.

What fun it is!

The farmer is glad when the hay is stacked high and dry. "Dobbin will have enough to last all the winter," he says, and rubs his hands with joy.



Nell likes to feed all the farm babies. There are baby chicks, little ducklings, wee piggies, young calves, lambkins and a new foal. What a lot of looking after they need! Tom likes to help at milking time. He gets a glass of fresh sweet milk.

A Boy's Song.

Where the pools are bright and deep,
 Where the grey trout lies asleep,
 Up the river and o'er the lea,
 That's the way for Billy and me.

Where the blackbird sings the latest,
 Where the hawthorn blooms
 the sweetest,
 Where the nestlings chirp and flee,
 That's the way for
 Billy and me.



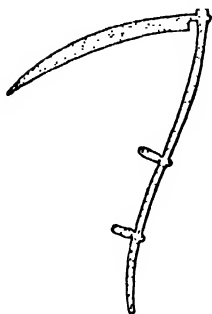
- James Hogg.

Where the mowers
 mow the cleanest,
 Where the hay lies
 thickest, greenest,
 There to trace the
 homeward bee,
 That's the way for
 Billy and me.

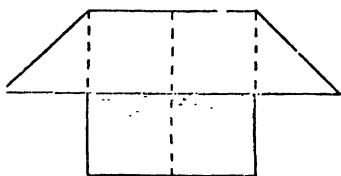


Clay Modelling—HAYRICK

Paper Cutting—SCYTHE



Paper Folding—A BARN



Children might crayon the door and window.

Free-arm Drawing—HAYFORK

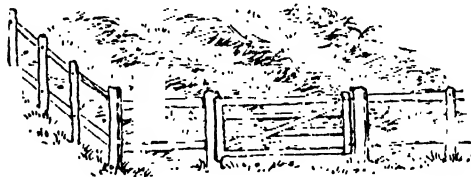


With both hands.



Make the ball of clay into a cylinder with rounded ends. Tap one end gently on modelling board to form base of rick. Work the other end out to a point, holding the clay in one hand and coaxing with finger tips and thumb of the other hand. Mark rough strokes with pin head to represent wisps of hay.

Brush Work—THE HAYFIELD



Hay, brownish green; rails and gate, brown madder.

Chalk Drawing—FLOWERING GRASS



Provide each child with a few flowering grasses, and encourage them to copy as faithfully as possible.

Object Lesson—THE COW

APPARATUS REQUIRED.—The ideal lesson will be given in a field where the cows are grazing. If this is not possible, provide as many illustrations as possible, e.g. picture of cows in field, cows drinking at a pond, milking time; models of milking stool, cans, pails, and the cow. A copy of David Murray's "Driving the Cows", or "The Wind on the Wold" (G. H. Mason; Tate Gallery) would form an excellent subject for conversation. The former picture is in the Leeds Art Gallery.

PREPARATION.—One of the first friends the children meet in the country is the "friendly cow all white and red". Encourage them to give in their own words their idea of this animal. Even those children who do not get long holidays in the country will be able to describe a cow, because this animal is so useful that it can be seen in busy towns.

PRESENTATION.—(a) **Description.**—Coat varies in colour, short strong hair which is used for binding mortar. Compare with wool of sheep. Tail is long, with a tuft at the end. Note what use the cow makes of it.

Ears are long, and move freely. Children will now be able to say why this is necessary. Horns, a means of defence; but as the cow is a domesticated animal it never needs to use them. Foot consists of four toes each covered with a horny case. The cow only uses the two front ones, which look as though the hoof had been split in two, hence the name "cloven". These two toes spread out when the cow puts her foot on the ground. When the fields are wet and the ground muddy, or the cow stands on the soft edge of a pool of water, these two spreading toes prevent her from sinking in.

(b) **Habits.**—(i) Gentle, meek, easily

frightened, and inoffensive. (ii) When feeding, the cow seizes the grass between the teeth in the front of its lower jaw and the hard leather-like pad on the upper jaw front. As there are no teeth in the front of the upper jaw, the cow must break off the grass instead of biting it. Show drawing of cow's mouth with thick, hard pad on upper jaw front, and strong, large teeth on lower jaw.

After breaking it off, the cow swallows the grass without chewing it. The grass passes into the paunch or first stomach. (The cow has really only one stomach, but this is divided into compartments so distinct that they are spoken of as separate stomachs.) When the cow has swallowed so much grass that this stomach is full, she leaves off cropping and lies down.

The grass then comes back into the mouth, and the cow grinds it between the strong teeth on each side of the back of the lower and upper jaws. When it is properly chewed the grass is swallowed finally. The lower jaw of the cow moves up and down and sideways. Ask why. Let children name another animal about which they have heard, which chews cud.

(c) **Uses.**—Gives milk, from which cream, butter, and cheese are obtained.

(i) **Milking.**—The cows are milked twice a day. Sometimes the milkmaid carries her stool and pail into the fields and milks there, but often the cows are driven into the shed at milking time. Show picture of cows coming home to be milked, or let a child pretend to call them home, "Cooe! Cooe!"

(ii) **Butter-making.**—Some of the milk is sent away into the towns; the remainder is kept and used for butter-making. The cream is separated from the milk by means of a separator. Ask children how Mother gets her cream from the milk. The farmer's

wife used to have to let it stand like this, but now she has a machine. Show picture of separator. The cream is then churned into butter. Show picture of churn.

ASSOCIATION.—Connect as far as possible with previous lesson on the country and the coming holidays. Compare with sheep as regards size, covering, habits, and uses.

Get children to describe the visit of the milkman to the town houses each morning.

FORMULATION.—Summary and generalization.

APPLICATION.—Let the children make some butter for themselves. They will be delighted to see the butter “come” after much shaking of cream in a medicine bottle.

Object Lesson —THE HORSE

APPARATUS REQUIRED.—Pictures of different kinds of horses, blacksmith's shop, and stables. Horseshoe and a model of a horse. If reproductions could be obtained, any of the following pictures would be admirable as illustrations for the nature lesson or subjects for conversation talks: “Colt-hunting in the New Forest”, by Lucy Kemp-Welch (Tate Gallery); “Mother and Son”, by H. A. B. Davis, R.A. (Tate Gallery); “The Cast Shoe”, by G. H. Mason, A.R.A. (Tate Gallery); “One of the Family”, by T. G. Cotman, R.I. (Walker Art Gallery, Liverpool).

PREPARATION.—Lead children to talk about the milkman's “turnout”, and thus introduce the horse to them; or, if preferred, refer to the coming holidays at the farm, and get the children to speak of the farmer's “right-hand” help, the hard-working horse.

PRESENTATION.—(a) **Description.**—Show model, and let children describe the horse's general characteristics.

Body, muscular and strong. Compare size with that of cow. Legs, sturdy and strong. Show difference in build between a carriage horse, which is often chosen for its beauty, and a cart horse, chosen for strength. Some horses, which are kept only for racing, have long slender legs.

Head, long. Compare with cow. Eyes, intelligent-looking. Teeth on both upper and lower jaws; sharp biting teeth in front

and molars behind. Draw on board, and contrast upper jaw with that of cow. Ears, movable. Show how, by moving ears, the horse can catch sounds better. Let children suggest another reason for movable ears. Neck, long and arched. The horse has a flowing mane.

Tail, short, thick, and pointed. It is covered with strong long hairs, which sometimes reach down almost to the ground.

Foot, covered with horny case, but not cloven like the cow's. As the horse has often to drag heavy loads over rough roads its hoofs need protecting, or the stones would wear it away. Show horseshoe, and let children describe the shoeing forge. How is shoe fastened to hoof?

(b) **Habits.**—(i) Quiet and gentle, obedient and intelligent. The horse can recognize his master's voice, step, or hand. He seems to know whatever is said to him, and can tell whether to go quickly or slowly. He stops or starts at his master's command, and will often stand still patiently waiting for a long time.

(ii) The horse eats hay, grass, oats, &c. Let children tell how he likes a carrot or a lump of sugar. He bites his food with the front cutting teeth and grinds it with his back teeth. The food is then finally swallowed.

(c) **Uses.**—(i) Used as a beast of burden. The horse either carries people on his back

or draws cabs, carriages, drays, carts, and vehicles of all kinds.

(ii) When dead, glue is made from hoofs, knife handles, &c., from bones, and leather from skin.

ASSOCIATION.—Comparison of horse and cow.

The horse has a long head and no horns.

The cow has a long head with two horns.

The horse has teeth in front of both jaws.

The cow has a hard gum instead of teeth on front of upper jaw.

The horse's neck is arched and has a

The cow's neck is not arched and has no mane.

The horse's tail is short, thick, and pointed, with long strong hairs.

The cow's tail is long, with short hairs, but it has a tuft of longer hairs at the end.

The horse chews its food and then swallows it.

The cow swallows and afterwards chews its food.

The horse works hard and draws heavy loads.

The cow does not work, but gives us milk

FORMULATION.—A general summary.

APPLICATION. —See correlated lessons.

Phonetics

PART I.—*Further Exercises in Tone and Breath Control.* PART II.—*The "foal oa"*

(i) "Where were we last week? We will leave the farmyard and go to the hay. The grass is ready for cutting. See the man with the scythe. 'Sh---' it whistles as he lops off the heads of the buttercups and daisies." Children take a deep breath. They begin with "s" softly in imitation of beginning of stroke. "S" develops into "sh" for the loud full stroke. Children dramatize mowing. "The grass in the next field has been mown some time. The hay wagon is ready, and Nell the cart horse stands near. 'Neigh!' she says as she shakes her head; 'I like haytime; it means sweet hay for me.'" Children say "neigh" (pronounced "nay") and shake their heads. If this be done gently it will help to loosen the throat, which often checks the full flow of sound by choking it. "The cart is full. Nell takes it to the haystack. The farmer

is glad. His children cry 'Hurrah!'" Children cry "Hurrah!" and prolong the second syllable. If they get this sound well, it will help in the pronunciation of such words as "father", "rather", &c.

(ii) "Nell has a baby. Here is a picture of her foal." Teacher produces drawing with "foal" printed clearly. From this she leads on to the introduction of the "foal oa" (pronounced the "fole o"). Children tell how the lips form a round "o" as in the "blow ow". Teacher tells them that the "foal oa" is printed differently from the "blow ow".

Sentences: The foal cannot pull a load yet. Sis and Jim do not like soap. Sis moans and Jim roars. They went to the coast. Jim set his boat afloat. He is boasting. "We are to have toast for tea. I hope it does not roast too long."

Number

Number 12.

The working and arrangement of an addition sum, e.g. $6 + 6$, introducing tens and units in the answer.

Teacher has the cardboard-box houses she used in lesson on eleven (8th week, Summer). She prints "T U" on board, and asks children what the letters stand for. Children print "T U" on their boards.

"It was haymaking time. Farmer Jones's hay was dry, and ready for carting to the shed. He had 6 cart horses." Children put out 6 counters, and write 6 under the "U" on their boards. Teacher takes great care that 6 is put in the right column. "6 horses were not enough, so the farmer sent to Farmer Brown and borrowed another 6." Children put out another 6 counters, and write 6 below the first figure 6. "How many horses has Farmer Jones now for his carting?" Children draw line under the

figures and tell that Mr. Jones has 12 horses.

"Ellen, bring your 12 counters to me. We will call them horses. Where shall I put them?" Children tell teacher that the Units House cannot hold more than 9 units or ones, and the Tens House only holds families of 10 units. "What must teacher do?" Children suggest putting 1 family of 10 units in the Tens House. Ellen writes 1 on the board, under the line and in the "T" column, to show what has been done. Children do the same on their boards. "How many are left? Where must they go?" Ellen writes 2 under the "U", and children copy on their boards. Teacher tells the class that this is the only way to write 12 with figures.

Other small addition sums, with 10, 11, or 12 as total, are worked by children on their boards.

Story—THE BELL OF ATRI

Hundreds of years ago, in a country far across the sea, there was a little town called Atri. The houses were built on the side of a hill, and the streets seemed to be always filled with sunshine. One day, the king of the country had a large bell put in the marketplace. It was hung just under the edge of a roof, so that it might be sheltered from the wind and rain. When anyone pulled the bell rope, the bell rang so loudly that all Atri could hear it. When it was fixed, the king rode in state through the streets, with all his courtiers and soldiers. His trumpeters blew loudly and long on their trumpets, and cried: "Hearken to the king's command! 'If wrong be done to anyone, he only needs to ring this bell, and the mayor will see that all is made right. The

king's order!" Hearken to the king's command!" Of course this pleased the people very much. If anything unfair was done, they had only to ring the bell and have justice.

Atri was a happy place after that. The bell helped the people to be good and just. Boys and girls were fair at their play, and men and women were true at their work. As time went on, the rope, being old, began to rot and break in the hands of anyone who pulled it. A man who was passing through the marketplace saw the ragged rope. He pulled some branches of bryony and mended the ends with them. What a pretty handle he made—a bunch of fresh green leaves and tendrils!

In all Atri there was only one miserable man, and he was unhappy because he had

grown greedy. He was called the Knight of Atri. At one time he was a noble courtier, and loved to hunt in the forest with spurs on his heels and a crimson-hooded falcon on his wrist. He was fond of his horses and his hounds, and used to treat them kindly; but now he loved only gold. He thought so much of money that he sold his fine horses and dogs, and even let people use his gardens and orchards for the sake of what they paid him. There was one horse he loved too well to part with, and so he kept it in its stall. Poor steed! its stall was nearly always empty, and its master too miserly to supply food. The knight would sit counting his money over and over, while his poor horse was growing thinner and thinner for want of food.

At last, the Knight of Atri said to himself: "Why should I keep this horse when food is costly and gold is precious? I only need him for holidays, and yet I must give him provender every day. I will turn him out to find his own food."

"So the old steed was turned into the heat
Of the long, lonely, silent, shadeless street;
And wandered in suburban lanes forlorn,
Barked at by dogs, and torn by brier and thorn."

One afternoon, when the golden heat of the sun was pouring down the streets of Atri, and all the people were dozing or asleep, the poor horse came into the marketplace. There, hanging within his reach, lay the bunch of bryony, fresh and green, which had been tied to the bell rope.

"Ding, ding, dong! Ding, ding, dong!
Someone hath done a wrong.
Ding, ding, dong! Ding, ding, dong!
Someone hath done a wrong."

So rang out the bell of Atri. What could it mean? Who could it be? The people, startled out of their sleep, rushed into the marketplace. The mayor, awakened from his nap, came panting to see who was ringing the bell, quite ready to see justice done. And behold, it was only the Knight of Atri's steed eating and pulling, biting and tugging at the braids of bryony. The mayor cried out—

"This is the Knight of Atri's steed of state!
He calls for justice, being sore distressed,
And pleads his cause as loudly as the best."

The people looked at each other, and began to talk about the knight's greed. At first they only pitied the poor horse, but they soon grew angry and called for the knight. When he appeared he said: "The horse is my own; cannot I do as I please with it?" Then the mayor said gravely: "Hearken to the king's command! 'If wrong be done to anyone, he only needs to ring this bell, and all will be made right. The king's order!'" In firm tones he then spoke to the Knight of Atri:

"He who serves well and speaks not, merits more
Than they who clamour loudest at the door.
Therefore the law decrees that as this steed
Served you in youth, henceforth you shall take
 heed
To comfort his old age, and to provide
Shelter in stall, and food and field beside."

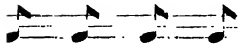
The knight turned away ashamed, while all the people joyfully led the steed home to his stall. From that day the knight fed well the horse who, although dumb, had pleaded for justice.

Retold from Longfellow's *Tales of a Wayside Inn*.

Song—"BUSY BLACKSMITH"

— E. Smith's *Songs for Little Children*.

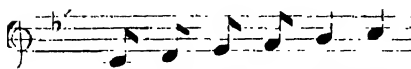
Game—THE BLACKSMITH'S SHOP



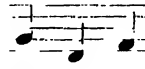
1. "Bu - sy Mis - ter Black - smith,



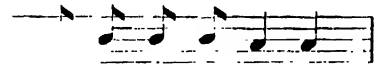
you make a shoe



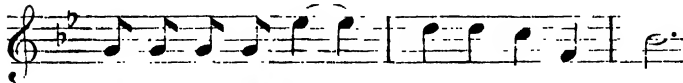
If you can't I shan't know



what to do.



Make your h:



make your bel - lows blow,

We have far to



ding! ding! ding!

I will do it now, sir;
 All is ready, see!
 Lift your foot up, Dobbin, on my knee.
 Then I put the nails in, driving straight and strong,
 While I sing my song,
 With ding! ding! ding! dong!"

3. "There! I think 't is mended.
 Fourpence, please, to pay."
 "Thank you, Mr. Blacksmith. Now, good day!"
 Gee up, Dobbin, let us gallop on our way.
 Hear the blacksmith say
 His ding! ding! ding! day!"

Directions.—The class may be divided into riders, horses, and blacksmiths. Each rider knows the blacksmith to whom he must go.

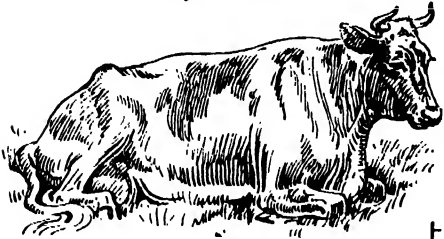
Verse 1. The riders advance towards the blacksmiths, holding their horses, which limp badly along. At the words "Ding! ding! ding! dong!" the blacksmiths pretend to strike on the anvil.

Verse 2. Blacksmiths sing, and lift horses' feet backwards. They pretend to drive in the nails.

Verse 3. When they have finished, they hold out their hands for the pay. The riders hand over the money and prepare to set out. The horses and riders gallop away to the music of the blacksmith's "Ding! ding! ding! day!"

Blackboard Reading and Drawing

"My name is Mooly Cow. Everybody knows me. I am fond of lying down in the fields; there I chew my cud.



If you treat me well, and let me have plenty of sweet tender grass, I will give you good milk.

Then you can have cream in your tea. Is not that nice? One day a boy came into the field with a big stick. He chased me round and round. At night, when the farmer milked me, he said my milk was spoiled.

"I break off the grass with my lower teeth and hard gum. Here is a drawing of my mouth. You bite your food with two rows of front teeth; I have only one row. I swallow the grass and afterwards bring it back to chew and grind. You cannot do that!



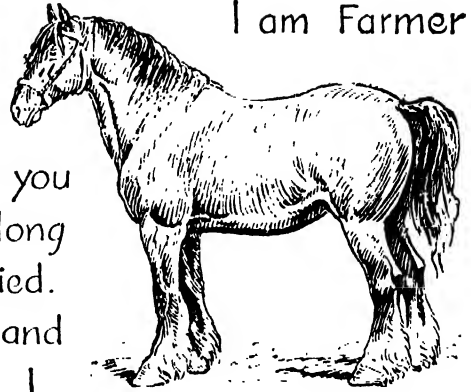
"How the flies bother me! I will flap my ears back, and swish my long tail. My hoofs are cloven.

When I walk the two front toes open so. When I lift my foot the toes close like this.



Don't you think I have kind eyes? The flies try to walk into them; then I wink and blink. Shall I put my cold nose into your hand?"

"Hello! Hello! I am Dobbin. Brown's cart-horse. Every morning I take the milk cans to the station. I am not ten years old yet. Could you work hard as I do? See my long mane. Sometimes, I have it tied. On May Day, the farmer combs it, and ties it with pretty ribbons. How I toss my head, and arch my neck then!



I am Farmer



My hoof is not cloven like the cow's. Here is the underside of my foot. I did not wear shoes.



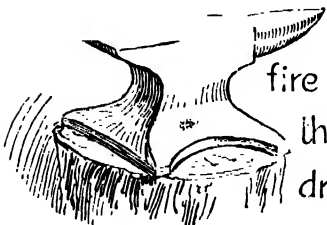
When I was a foal I did not wear shoes.

When I was a foal I did not wear shoes. Did you when you were a baby? But, when I began to work,

my master took me to the blacksmith. This is the shoe he made for me. Of course he made me three others as well. Once I lost a nail out of my shoe and my shoe came off. I had to walk a long way; it made me lame.



Have you been in a forge? I like to go I get new shoes. Do you like new shoes? Shall I tell you how my shoes are made? The smith puts a piece of iron in the fire and blows his bellows.



When the iron is red hot he takes it from the fire and beats it into shape on the anvil. How the sparks fly! You need not be sorry to see the nails driven in my hoof. They do not hurt at all."

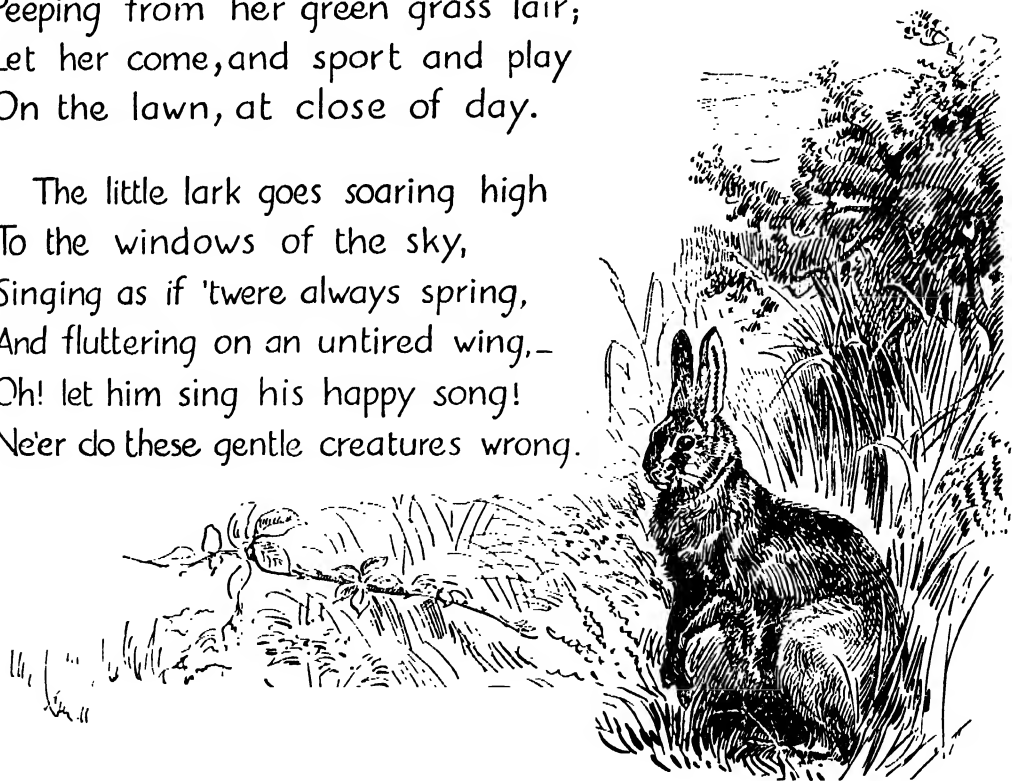
Kindness to Animals.

Little children, never give
Pain to things that feel and live:
Let the gentle robin come
For the crumbs you save at home,—
As his food you throw along,
He'll repay you with a song..



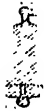
Never hurt the timid hare,
Peeping from her green grass lair;
Let her come, and sport and play
On the lawn, at close of day.

The little lark goes soaring high
To the windows of the sky,
Singing as if 'twere always spring,
And fluttering on an untired wing,—
Oh! let him sing his happy song!
Ne'er do these gentle creatures wrong.



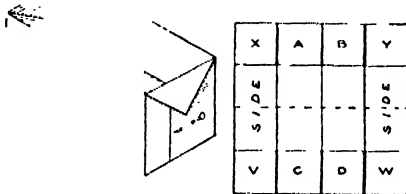
Other poems suitable for recitation:—1. "Farewell to the Farm"—R. L. Stevenson. 2. "The Friendly Cow"—R. L. Stevenson. 3. "The Fly-away Horse"—Eugene Field.

Paper Cutting—THE BELL OF ATRI (See Story)



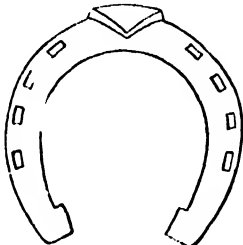
Market house and bell in different colours.

Paper Folding—PIG'S TROUGH



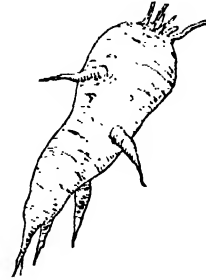
Fold into quarters as for screen. Cut along the thick lines. Fold down the sides of trough, and pin X and Y, and V and W, together to form the ends. B goes behind A, D behind C. These form points which must be folded over and fastened down as in L.

Free-arm Drawing—HORSESHOE



With both hands

Clay Modelling—A CARROT FOR DOBBIN



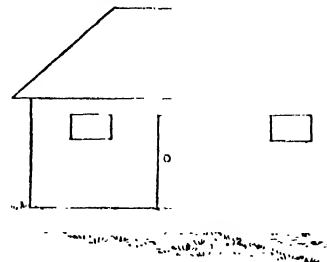
Steps:—Circle, cylinder, cone, marks and twistings, rootlets, head with sprouting "fingers". Before modelling, break off a piece of clay for rootlets and sprouting fingers.

Brush Work—A TURNIP FOR EITHER THE HORSE OR THE COW



Colours:—Lower part and fibres, white; upper portion pale green, with purple round the end of leaf stalks.

Brown-paper Drawing—STABLE



Colours:—As desired.

A YEAR IN THE INFANT SCHOOL

Object Lesson—AT THE SEASIDE

MATERIALS REQUIRED.—Let each child bring some shell or picture of a shell—oysters, clams, mussels, snails, &c. Provide a crab or picture of one. If possible use a dead crab, which may be found at low tide on the sands. If live shellfish are used, keep them in a vessel containing clean sea water with sand at the bottom. Let children bring pebbles, seaweed, or anything they have kept from last year's visit to the seaside.

PREPARATION.—Some of the children will be spending their holidays in the country, about which they talked last week. Others are going to the seaside. Get the children to tell why they like the sea. An encouraging manner, and free expression allowed to the children, together with a picture of the seaside, or blackboard drawings of the sands, will create a keen desire in the children to hear more.

PRESENTATION.—(a) *The Beach.*—(i) *The Sands.*—Let children say why they like the sands. Their reply will probably be because here is a good playground. The bigger boys play cricket and the younger children dig and build. Sometimes the sand is moist. Why? The little builders can work better in moist sand. The little “curly” lines, which are to be seen on the sands when the tide goes out, are made by the stirrings of the tiny waves.

What is sand? Provide each child with a few grains and let them examine these. Tiny pieces of stone are broken off the rocks and rub against each other. The waves play on them and knock their corners off. This continued action produces at length fine sand.

(ii) *Pebble*—Children examine specimens and suggest what they are. During a storm the waves, blown by the wind, lift pieces of rock from the beach and dash them against

the cliffs. They are broken into small pieces, which in time are rolled and rubbed smooth by the action of the waves.

(iii) *The Rocks.*—The “grown-ups” prefer the rocks to the sands, because here they can sit and read or sew.

The sea, in dashing against the shore, has washed away the soft earth and left only the hard rocky portion standing. Even these rocks are worn away in the course of time by the forces of frost, wind, and wild waves.

(b) *Shell Life at the Sea.*—(i) *Crabs.*—Show living specimens. The boys know these animals well, especially if they have felt a pinch from their strong claws when wading barefoot in the sea. Crabs are covered with a crusty shell which protects them from their enemies. Contrast our bones, which are inside, with the outside bones of the crab. All the leg-like parts around the head have a use, e.g. the smaller pair has ears at the base; the larger, feelers. There are four pairs of legs for running. Remind children how they have seen the crab scuttling across the sands out of the way of harm. The toothed edges of the crab's crusty armour are a further means of protection. With these he attacks his enemy, or gathers seaweed with which he hides himself in times of danger.

When young, the crab is in fear about four times a year. His shell will not allow him to grow any larger, so he must part with it. He swells out his body till his shell bursts away from under him. Then, with much difficulty, he creeps out and finds a dark hole where he can hide until his new shell grows. Some crabs (hermit-crabs) have no shells at all; these find empty periwinkle, whelk shells, &c., and make them act as defensive coverings.

(ii) *Shrimps.*—These are tiny fishes just

as crabs are. They are useful because, like the crab, they eat decaying animal matter, thus keeping the shores clear from anything harmful.

(iii) *Oysters, Mussels, Cockles*.—These are fishes whose house is their shell. Show living specimens, and let children see how the shells open from time to time. Explain why. There are hundreds of thousands of these creatures to be found everywhere in the sea, on the shores, clinging to piers and rocks, in the middle deeps, and down on the sea floor. They need their shells for protection from their sea enemies. If desired, tell how some shellfish are free and swim, while some cling to the rocks and never leave home.

(c) *Fun at the Seaside*.—Let children tell about the ventriloquist who takes his stand on the sands. The Punch-and-Judy show is a source of keen delight to the little ones also. Coon entertainments and nigger-minstrel concerts add to the fun at the seaside. The building of sand castles is, however, the most amusing of seaside employments.

ASSOCIATION.—Connect with the coming holidays.

FORMULATION.—Generalization of the lesson.

APPLICATION.—Ask children to bring back from the seaside any curious shell, pebbles, or seaweed they think would be of interest. For further application, see blackboard poem and reading.

Phonetics

PART I.—*Breathing Exercises*. PART II.—*The "oyster oy"*

(i) "Who is going to the seaside these holidays? Who has been before? Have you ever stood on the promenade and watched the tide come in? What a noise the waves make as they wash up the sea wall! 'S-wish--sh!' they sing as they leap higher and higher." Children imitate the sound. They breathe in through the nostrils as they lift their arms in front and then swing them backwards and down. They bring their arms forward with a swing as the first part of the sound is made. The arms are swung round twice for "wish" and "sh". Teacher sees that although each part of the "swish" sound is brought out with much force, the children do not breathe in between.

(ii) "When you are at the seaside you will see plenty of shellfish. Here is one. What is it? Tom, tell me the first sound in

'oyster'. Print it. Tom probably prints the 'oi' learned in a previous lesson. Yes, that is the 'toil oi', but the 'oyster oy' is different. Here it is." Teacher produces card printed "oy", and children repeat the sound while they print it on boards. The word "oyster" is built, and teacher shows record—a drawing of an oyster with "oyster" underneath. "Ned, build 'toy', and use the 'oyster oy'. Sam, change 'toy' to 'boy'. Harry, change 'boy' into 'coy'. Tim, turn 'coy' into 'joy'. Ida, make 'joy' into 'joyful'."

Sentences for reading: Roy is at the seaside. He has a lot of toys. He digs in the sand. The tide will destroy his sand castle. It will annoy him. He got an oyster in his net. Roy is a joyful boy. "A-hoy! A-hoy!" he cries to the big ships.

Number

Number 12 continued.

(a) $11 + 1 = 12 \therefore 12 - 1 = 11$
 $10 + 2 = 12 \therefore 12 - 2 = 10$
 $9 + 3 = 12 \therefore 12 - 3 = 9$
 $8 + 4 = 12 \therefore 12 - 4 = 8$
 $7 + 5 = 12 \therefore 12 - 5 = 7$
 $6 + 6 = 12 \therefore 12 - 6 = 6$

$1 + 11 = 12 \therefore 12 - 11 = 1$
 $2 + 10 = 12 \therefore 12 - 10 = 2$
 $3 + 9 = 12 \therefore 12 - 9 = 3$
 $4 + 8 = 12 \therefore 12 - 8 = 4$
 $5 + 7 = 12 \therefore 12 - 7 = 5$
 $6 + 6 = 12 \therefore 12 - 6 = 6$

Specimen Questions.—*Addition*—

(i) Sam and Ella are going to the seaside. Ella is 10. Sam is 2 years older. How old is Sam?

(ii) Father bought a spade each for Sam and Ella. Ella's spade cost 7*d.* Sam's was 5*d.* more. How much did Sam's spade cost?

Subtraction—

(i) Ella wanted 12 pink shells to thread for her neck. She could only find 8. How many more had she to find?

(ii) After dinner the children went to

watch the pierrots. There were 12 of them dancing and singing. Soon 2 of them stopped, and went round with the hat. How many pierrots left to sing?

(b) $1 + 3 + 8 = 12 \quad 12 - (1 + 3) = 8$
 $3 + 8 + 1 = 12 \quad 12 - (3 + 8) = 1$
 $8 + 1 + 3 = 12 \quad 12 - (8 + 1) = 3, \text{ \&c.}$
 $2 + 4 + 6 = 12 \quad 12 - (2 + 4) = 6$
 $4 + 6 + 2 = 12 \quad 12 - (4 + 6) = 2$
 $6 + 2 + 4 = 12 \quad 12 - (6 + 2) = 4, \text{ \&c.}$
 $3 + 4 + 5 = 12 \quad 12 - (3 + 4) = 5$
 $4 + 5 + 3 = 12 \quad 12 - (4 + 5) = 3$
 $5 + 3 + 4 = 12 \quad 12 - (5 + 3) = 4, \text{ \&c.}$
 $2 + 3 + 7 = 12 \quad 12 - (2 + 3) = 7$
 $3 + 7 + 2 = 12 \quad 12 - (3 + 7) = 2$
 $7 + 2 + 3 = 12 \quad 12 - (7 + 2) = 3, \text{ \&c.}$

Addition—

Sam, Ella, and Baby Ned went crab hunting. Sam saw 8 baby crabs, Ella saw 3, and Baby Ned saw 1. How many crabs did they see?

Addition and Subtraction—

The stand for 12 donkeys was empty. 10 donkeys came back after a time, and 2 more galloped up. How many were yet to come in?

Story WANTED, A HOUSE TO LET

Once upon a time a great many crabs were playing by the seashore. They looked quite funny as they swam lazily about, pulling with the legs on one side of their bodies, and pushing with those on the other. Some were floating with the tide and some were crawling on the sea floor. Others were doing nothing but talking. "We must not stay so near the surface of the sea," they said "or we shall be gobbled up by the greedy fishes. No; we must all swim

to the bottom of the sea, and hide until our shell coats grow." "Is it not dark and lonely?" the very tiny baby crabs said; "it seems so far away to the bottom of the sea." "Oh no!" the bigger ones said; "there are many grown-up crabs down there. Now, are we all ready? Then—Off!"

There was one little crab, called Hermit Crab, who wanted to stay by himself. He was a proud little chap, and thought he would wait until his shell coat grew before

he followed the other crabs. "It will be a beautiful one, I am sure; I shall astonish the others," he thought, as he let them all go away, pushing and scuttling down to the floor of the sea. Hermit Crab waited and waited, but his shell did not grow. This was very strange, because his legs were growing longer and very strong, and his claws were becoming broad and very sharp. "Oh dear!" he said to himself; "I believe I shall never grow a shell at all!" and he was just settling down to grieve about it, when he saw a pair of fierce-looking eyes and a terribly wide mouth. This was certainly not the time to worry, and Hermit Crab started up in fear. He knew that if that dreadful fish monster caught him, there was an end to his ever joining his crab play-mates on the sea floor. He hurried off in a great panic, scuttling away as fast as he could until he got out of sight of his enemy.

Hermit Crab began to realize that it would never do for him to stay as he was; he must have something to protect him from his foes. He knew that without a shell he was a tempting little morsel; but with one—why, he would fear nothing! No one would care to eat a crab with a hard shell all round him. He must therefore look out for a shell to live in, seeing that he could not grow one of his own. And now began a busy time for Hermit Crab. He swam down the sea roads, looking to right and left, but could find no empty shell. He sailed through the sea park, which was full of beautiful sea anemones, but in vain. He spent a dreadful time scampering over the sands in fear of being seen; but at last he found what he wanted—an empty periwinkle shell. "Just the thing!" thought Hermit Crab as he backed inside. "How lucky I am!" Now the periwinkle shell was too small to cover the whole of Hermit Crab's body, so he had

to let his legs and claws hang out of the front door.

Then, and not till then, did the little crab feel safe. "Ah," said he to a crusty-coated crab who was swimming that way, "how delightful it is to have a home of one's own!" "All very well," said the crusty crab; "but what will you do when you grow bigger? Don't you see you cannot even get your whole body in now. I wonder how you manage to stop inside there at all." "I have fastened myself to the walls with the two hooks at the end of my tail; they keep me inside this snug little house," the little crab replied. "I don't think anything could push me out." Just then a strong wave rose and tried to wash Hermit Crab out of his new house. But no! there he was, as safe as ever.

After a time, however, the words of the crusty-coated crab came true. Hermit Crab grew too big for his tiny shell house. "Wanted, a house to let!" he called out as he searched among the seaweed. Again he had a dreadful time. "Oh, how I wish," he said, "that I had a shell of my own! I am like a soldier who has nothing to fight with. Oh! that dreadful fish again! Where can I hide? Wanted! wanted! wanted, a house to let!" he cried again and again. There was no answer, but the little crab heard a low sweet song. "That must be the song the sea sings in an empty whelk shell," he thought. "I know it well; the sea never sings that song anywhere else." Hermit Crab was right. Following the sound, he came to the empty shell and crept in it sideways, as all crabs creep. He fastened himself in with his tail, and settled down once more. What became of Hermit Crab after that I cannot tell. Perhaps he went to find the other crabs, and plays with them on the sea floor.

Other stories:—"The Little Oyster"—*Palmerston Readers*, Book I. "Grace Darling." "Napoleon and the Young English Sailor", by Thomas Campbell, in Junior Division of *Model Poetry Books* (Blackie).

Song—"WHEN THE GREAT WAVES OF THE SEA SING THEIR WONDROUS SONG TO ME"

—Mrs. Ormiston Chant, in *Daisies and Breezes* (Curwen).

Game—AT THE SEASIDE



1. Oh, we are mer - ry lit - tle girls and boys, Who
love to play all day be - side the sea, my spade and
pail the best toys, We
be, We dig a - way as
as can

2. And we're the ships a-sailing to and fro.
The wind you hear, who sings his noisy song,
Will swell our sails, and, with a steady blow,
He'll help these tidy little crafts along,
He'll help these tidy little crafts along.

3. Oh, see the donkeys standing in a row!
Their master's waiting, holding out his bands,
We'll pay our fare—Hurrah, hurrah! we go,
With gallop, and gallop, and gallop along the
sands,
With gallop, and gallop, and gallop along the
sands.

4. We little ones are wading by the shore,
Our clothes tucked up, our stockings in one hand.
The tiny waves are best; the big ones roar,
And make us paddle quickly back to land,
And make us paddle quickly back to land.

Directions.—*Verse 1.* A chalk mark is made on the floor, and children are told that this represents the edge of the sands; farther than that line is the sea. Some of the children pretend to dig the sands, carrying, pating, and arranging it into imaginary castles.

Verse 2. The boys, arranged in pairs, are the ships sailing on the "sea". The boys face each other, holding arms and sitting on each other's feet with knees bent. In this way they can make headway across the sea.

Verse 3. Some of the children stand in a row some distance off. They are the donkeys; their master is an elder child. Other children come up, and after paying their fare they stand behind the "donkeys". At the words "Hurrah, hurrah!" the donkeys gallop off, followed by their riders.

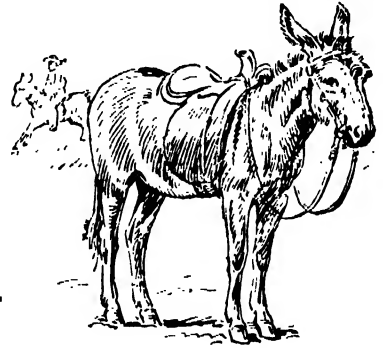
Verse 4. The smaller children paddle close to the shore, and hold up their skirts; the boys can fold back the knees of their knickers. At the word "roar" they all rush back to land.

Blackboard Reading and Drawing



Hooray! Hooray! Did anyone see such a castle before? Tom and Winnie have made it by themselves. It has a moat filled with water, and windows made of shells. Do you know what a moat is?

Tom and Winnie are at the seaside for a week. Tom wants a donkey ride. Neddy will run fast. How he likes a carrot! Sometimes his master beats him. Poor Neddy!



Here is Tom's net
He tries to catch fish in it.
One day he caught a crab.

Here is a picture of one.

bitten by one? The crab
When he grows big, his



little. The crab has then to burst his coat and get out of it. It is cast off in some dark hole; and poor crab must wait there until his new one grows. He dare not come out without it. Do you know why?

Have you ever been
is a funny animal.
crusty old coat stays



Do you know what this is? The oyster opens his shell when he breathes. He hides in his shell when danger is near. He loves the sea as much as you boys and girls.

A YEAR IN THE INFANT SCHOOL



Pebbles.

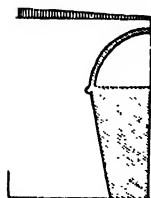
Oh little pebbles down by the sea!
I wonder if you are waiting for me,
Shining, and dancing in the
warm light,
Washed by the waves, and
looking so bright.

Dear little pebbles, white as the snow,
I'll tell you something, perhaps, you don't know:
The summer is coming, and so are we,
For father says we may go to the sea.

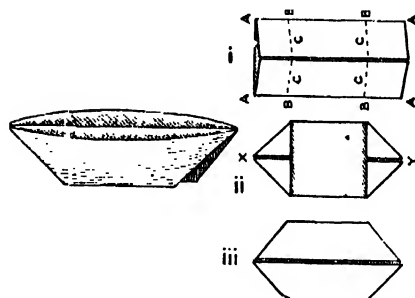
I'll tell you another thing, pebbles so kind:
I will bring _unless Nursey should leave them behind_
A pail and a shovel, and what I will do
Is to dig a big hole for a well_ wouldn't you?

O summer, do hurry! O, spring's gone away!
Little flowers, please 'blossom! Dear birds,
sing your lay!
And the sooner you do it,
the better for me,
For the pebbles are waiting,
I know, by the sea.

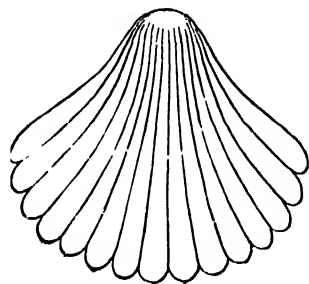
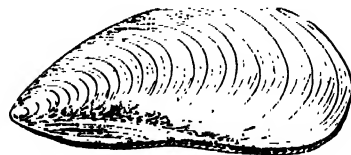


Paper Cutting—SPADE AND PAIL

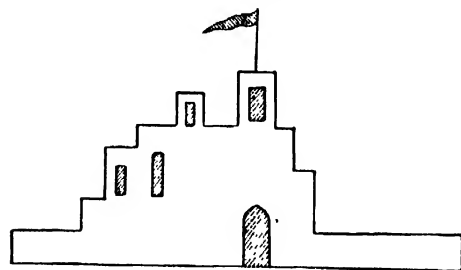
May be cut without folding if desired.

Paper Folding—A DOUBLE RAFT OF BOATS

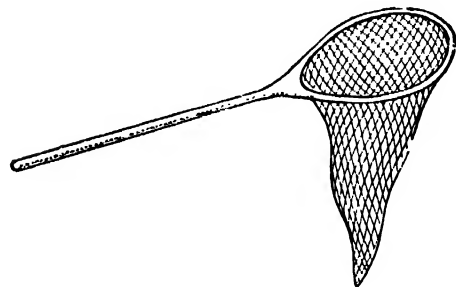
Fold as in fig. i. Turn over, and fold as fig. ii. Get points XY by pressing lines AB along lines C. Turn papers again, and fold as in fig. iii, then fold halves back.

Free-arm Drawing—CONVENTIONAL COCKLE-SHELL**Clay Modelling—A MUSSEL SHELL, FROM NATURE**

Break clay in two for the two halves of shell. Steps: Circle, oval, flattened oval, grooved oval, markings. When both halves are finished, place together. To groove the oval, place in palm of one hand, and, with thumb of other hand, press until the right hollow has been obtained.

Brush Work—SAND CASTLE

Castle, golden yellow; flagstaff, windows, and doors, vandyke brown; flag, crimson.

Chalk Drawing on Brown Paper—CHILD'S NET

Have a real net in front of class, and let the children copy the shape and colour as far as possible.

Object Lesson—THE SEA

APPARATUS REQUIRED.—Pictures of beaches, rocks, ocean (an advertisement for Atlantic or Pacific liners is a capital illustration); models of a ship and a lighthouse; a freshly caught herring. Any of the following pictures are suitable as illustrations or subjects for conversations, expression lessons, &c. "The Lighthouse", by Stanhope Forbes, A.R.A., in the City of Manchester Art Gallery; "How We Caught the Pilchards", by Napier Hemy, A.R.A., in the Walker Art Gallery, Liverpool; "Commerce and Sea Power", by W. L. Wyllie, A.R.A., in the Guildhall Art Gallery; "The Herring Market at Sea", by Colin Hunter, A.R.A., in the Manchester Art Gallery; "Caught by the Tide", by J. C. Hook, R.A., in the Guildhall Art Gallery.

PREPARATION.—One of the chief joys at the seaside for the younger children is wading in the sea. Connect in this way with last week's lesson. What is the sea? Encourage children to give in their own words their ideas as to its size, strength, colour, and taste.

PRESENTATION.—(a) **Why the Sea is Salt.**—The rivers rushing to the sea wash the salt out of the land through which they pass. This they carry down with them, and it is dissolved in the sea-water. Although the sun drinks up some of the water, the salt remains behind. It is very probable, too, that there is much salt in some of the land which forms the bed of the oceans and seas. Why is it good that the sea is salt? Get children to tell how Mother uses salt to keep food which might otherwise decay and smell.

The children will probably have the idea that there is only one sea—the sea at Blackpool, Brighton, or wherever they spend their holidays. There are many seas, large and smaller ones. Some seas (oceans) are so

large that a ship sailing on them is out of sight of land for weeks. These seas all put together would be so vast that all the land in the world would look small beside them.

(b) **Life in the Sea.** The children heard about the shellfish last week: there are thousands upon thousands of other fish in the sea. The children can name some well-known ones. Some fishes come in great shoals near the coast. These shoals are so vast that the sea glitters with the brightness of the fishes' scales as far as the eye can see. One fish may have as many as 60,000 eggs in its roe. This accounts for the multitude of fishes still in the sea in spite of the fact that men make their living by catching them. More than this, small fishes are the prey of larger ones, and sea-gulls and other sea birds feed on them.

(c) **Fishing (Herring Fishery).**—The boats are manned by three or four men. They set out at night with the nets, because now there is the chance that the fish cannot see them. In the dark the fish strike against the nets and are caught. The nets are very long, and hang straight down. They are allowed to drift about with the tide for hours. They keep in this perpendicular position because they are weighted with lead at the bottom. At the top, to keep them from sinking, there are cork floats. Show picture of fishing fleet if possible, and contrast nets with children's toy shrimping nets. Show the fresh herring, and let the children realize how great and strong the nets must be, if they are to catch hundreds of these fishes at one draw.

(d) **Dangers of the Sea.**—The seas are sometimes stormy, and then ships are often dashed to pieces on the rocks. Lighthouses are built on dangerous coasts to warn sailors, and bells are fastened to hidden rocks so that the seamen may know to keep away.

All round the coasts there are lifeboat stations, where brave and willing men are ready to man the lifeboat if the necessity arises. Show picture of a lighthouse, and speak of its necessary strength, with which it faces the storms. Describe the lighting of the lamps, and the care with which the lighthouse keeper keeps the windows bright and clear.

(e) **Uses of the Sea.**—(i) The sea coasts are usually very healthy places, and are used as holiday resorts.

(ii) The sea carries ships to and from other lands with exports and imports. Without the sea to take the ships along, we would have to do without many necessities of food and clothing, such as corn and wool, because these are not supplied in sufficient quantities in our own land.

The ships carry men and women to all parts of the world, and so we get to hear all about the people of other lands.

(f) **The Ships of the Sea.**—These vary in shape, size, and appointments according to their use. The fishing smack is a comparatively small vessel with sails. Contrast this with the ocean steamer built for the accommodation of passengers. Contrast a merchant vessel with a man-of-war, and let children try to find a reason for all their differences. Show models. If time permits, tell children about the language of ships—how the captain of one ship can tell what the captain of another ship wishes to say to him, by means of the running up and down of certain flags. The flags can be seen from a distance too great for the voice to carry. Ships at sea can now talk to each other by means of wireless telegraphy.

ASSOCIATION.—Connect with the coming holidays.

FORMULATION.—A general summary.

APPLICATION.—See correlated lessons.

Phonetics

PART I.—*Exercise in Breath and Tone Control.* PART II.—*The “sea ea”*

(i) “Last week we pretended to listen to the waves which break on the shore, and made their song. Shut your eyes and try to see a lighthouse standing high upon the rocks. The sea is very stormy. The mighty waves dash over the rocks. Can you hear the storm as the breakers roar, ‘Boo-m; boo-m!’?” Children lift both arms high to the left in imitation of the rising waves. At the same time they inspire deeply. At “boom” they swing their arms down and then up to the right. Breath is taken in between each “boom”. The beginning of the sound should be emphasized greatly. There should be a long-sustained round “oo”, and the “m” should gradually die away.

(ii) “We have spoken so much about the sea, I wonder who could build the word!”

Although the “sea ea” has not been taken before, some child will probably be able to do it. “You see, here is a new way of showing the sound ‘ee’.” Teacher points to “ea”. “Jane, build me ‘sheep’ . . . Right. Willie, build ‘Pete’ . . . Right. All these ‘ee’ sounds are printed differently, so you must be careful to remember each one. To-day we will use only the ‘sea ea’. Who can make ‘sea’ into ‘seat’? Right. Now, Jack, change ‘seat’ into ‘seal’. George, change ‘seal’ into ‘seam’,” &c.

Sentences for reading: Look at the *sea*. It *steals* upon the *beach*. How *clear* the *sea* is. Please, dear waves, *speak* to me. Tell me the *reason* you flow along *year* after *year*. This *seat* of sand is *easy*. I *mean* to stay till *tea*-time. Mam has a *sealskin* coat. She does not use it in the *heat*.

Number

Further work on number 12.

(i) $12 \div 1 = 12$ $\therefore 1 \times 12 = 12$. $12 \div 12 = 1$ $\therefore 12 \times 1 = 12$.

"Walter had a fishing-rod and line. He caught 12 small fishes one day. Each time he threw his line in the sea he caught 1 fish. How many times did he throw?" Children work with concrete objects, and then write $12 \div 1 = 12$.

(ii) $12 - 6$ twice $= 0$ $\therefore 12 \div 6 = 2$ $\therefore 6$ is one-half of 12. $\therefore 6 \times 2 = 12$.

"Walter's father, mother, uncle, aunt, brothers, and sisters wanted to go for a sail. The boatmen would only let 6 ride in one boat. There were 12 in the party. How many boats would they require?" Children separate counters and write $12 \div 6 = 2$.

(iii) $12 - 4$ (3 times) $= 0$ $\therefore 12 \div 4 = 3$ $\therefore 4$ is one-third of 12. $\therefore 4 \times 3 = 12$.

"Tessa was lying on the sand. She counted 12 donkeys' legs. How many

donkeys were there?" Children separate counters into groups of 4, and write $12 \div 4 = 3$.

(iv) $12 - 3$ (4 times) $= 0$ $\therefore 12 \div 3 = 4$ $\therefore 3$ is one-fourth of 12. $\therefore 3 \times 4 = 12$.

"Walter saw 12 boats sail by. One quarter of them were fishing boats. The rest were not. How many were not?"

(v) $12 - 2$ (6 times) $= 0$ $\therefore 12 \div 2 = 6$ $\therefore 2$ is one-sixth of 12. $\therefore 2 \times 6 = 12$.

"Walter's people stayed on the sea for half an hour. When they got back, each boatman was paid 1s. How much was that for each person when there were 6 in each boat?" Six children are chosen for the party in one boat. One of them pays the boatman (teacher) 1s. By changing the cardboard shilling for 12 cardboard pence, teacher shows that the cost per head was 2d. Children write $1s. \div 6 = 2d.$ or $12 \div 6$

Story—THE OYSTER'S STRANGE COMPANION

Long ago, an oyster, whom we will call Young Oyster, was born, along with many others, in the sea. When he came out of his egg the mother oyster kept him in her shell for some time. But one day she opened her shell, and the sea washed the baby oysters out. Young Oyster had a clear, shiny, soft mantle wrapped round him. This was very pretty, but it was no good if the fishes came along to eat him up. So he began to turn the soft mantle into a hard shell. He did this by using something he found in the sea water which he was always drinking. "Ah," he said, "at last I have built my house! I must now make the inside of it cosy." So he painted the inside with most beautiful tints. The outside of his shell house was rough, like ours, but the inside was smooth and lovely. Sometimes

Young Oyster would fasten the curved bottom of his shell house to a rock; and there he would stay, eating all the small animals and plants that came that way. He loved to feel the fresh sea water round him; so he often lifted the flat roof of his house and let the water flow over his body.

One day, whilst Young Oyster was enjoying the sea water, a dark shadow passed over him. "An enemy!" he said to himself, and shut his roof down quickly. He was mistaken; it was only the shadow of a boat sailing on the sea, and so he opened his house again with a sigh of relief. But this time something happened! A tiny speck of sand got into the Oyster's shell house. Oh, how dreadfully that speck hurt him! He begged his unwelcome visitor to go away. "I have no room for you. My house

was only built for one," he said. "If you knew how you scratch my side and stab my soft body with your sharp points, I am sure you would go away;" but the grain of sand made no reply. Poor Young Oyster was in terrible pain. He asked the sea to sweep it out. "Oh, sea," he said, "try hard! The other day you washed this dreadful sand into my house; will you not clean it out again?" The sea tried again, but it could not.

At last a bright idea came to the oyster. He thought: "I cannot make this prickly

visitor of mine go away, but I can cover him over so that his sharp edges cannot cut me and his pointed corners cannot stab". So Young Oyster took out of the water he drank all that he needed for the new little mantle. Such a dainty mantle it was, no larger than a tiny bead, but it acted well. There was no more scratching and hurting; Young Oyster was happy again.

A long, long time after, when a diver brought the oyster out of the sea, it was opened, and lo!—there was a shining pearl inside.

Other stories:—"The Fisherman and the Flounder"—Grimm's *Fairy Tales*. "Columbus"—Adapt. "Inchcape Bell and Sir Ralph the Rover"—Adapt.

Songs —1. See last week's Song

2. THE SEA

—*Teachers' Times*, January 18, 1907.

Game—THE LIGHTHOUSE

1. We will make straight and

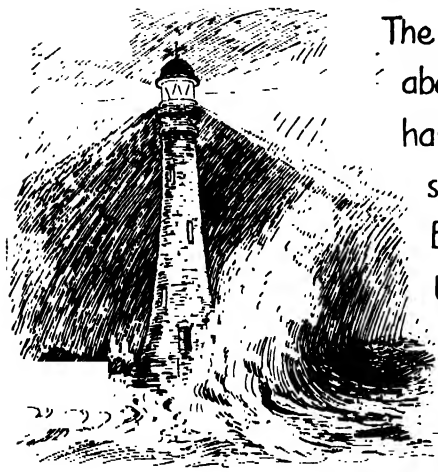
Which will guide the ships See, the keep - er

brings his light, top flight.

2. See the breakers dash upon the shore;
Sailors fear when they hear them roar;
But the light shines merrily,
Lighting up all the angry sea.

Directions.—The lighthouse is represented by a tall boy who stands upon a chair holding a taper in his hand. The remainder of the class form a ring (the sea) round the rocks (other children in a smaller ring) upon which the lighthouse is built. The keeper brings a lighted taper, and pretends to climb stairs. He lights the lighthouse "lamp". *N.B.*—The actual lighting may be omitted, if the teacher objects on the ground of danger from fire. A few boys can be ships (see last week's game) sailing on the angry sea, which is represented by the ring-children, who clasp hands and raise them above their heads and let them fall again to the rhythm of the music, in imitation of the action of the waves.

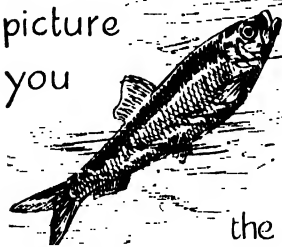
Blackboard Reading and Drawing



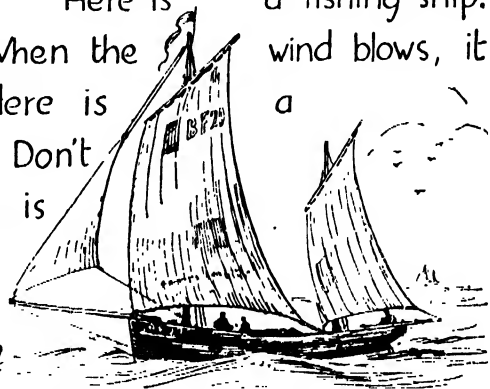
The sea is angry. The wind is dashing it about in great waves. The light-house keeper has lit his lamp in the tower, to tell the poor sailors to keep off the rocks.

Boom! Boom! roar the waves. They toss the big ships about. If a ship is going to be wrecked, the life-boat will be sent out. Are not the lifeboat men brave? Here is a fishing ship.

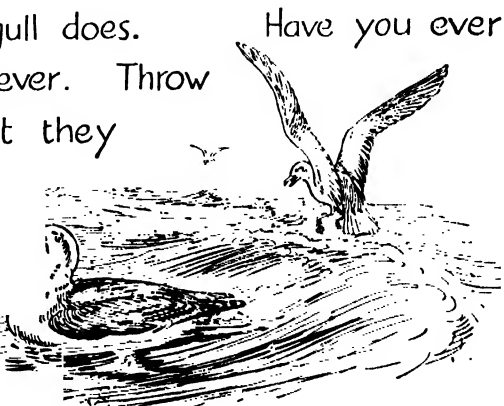
The fishermen call it a smack. When the wind blows, it will sail out to catch herrings. Here is picture of a herring. Don't you think a herring is like a boat?

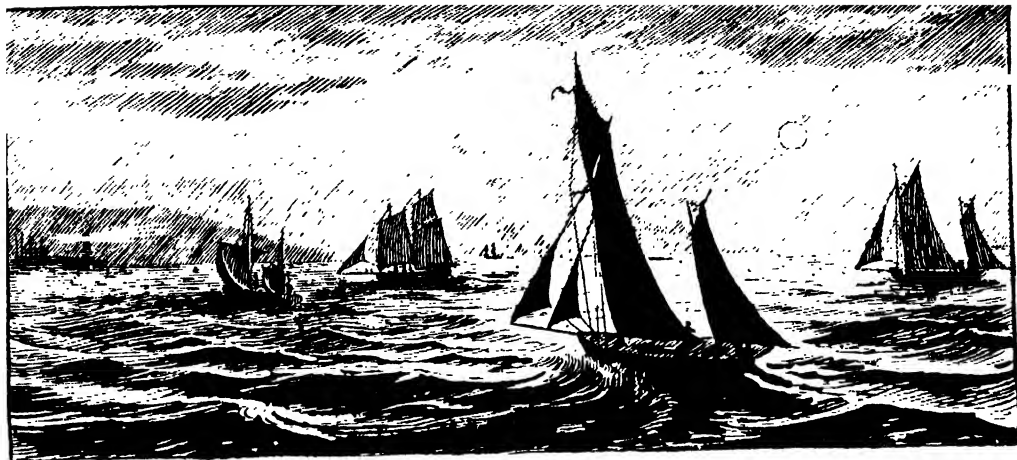


Can you find the rudder of a boat?



Find the herring's rudder. The fish guides itself with its tail just as the sea-gull does. Have you ever seen the sea-gulls? They are very clever. Throw them a crumb. If they miss it they will dart below and catch it before it touches the water. They can fly for miles without being tired, and they can swim as well as the duck.



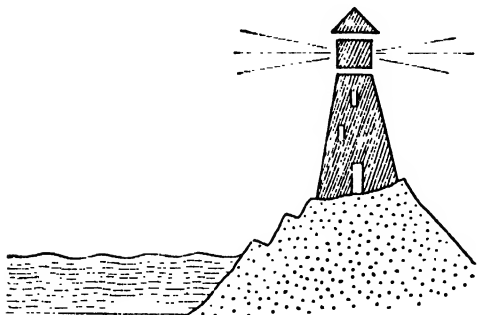


Sweet and low, sweet and low,
Wind of the western sea,
Low, low, breathe and blow,
Wind of the western sea!
Over the rolling waters go,
Come from the dying moon and blow,
Blow him again to me;
While my little one, while my pretty one sleeps.

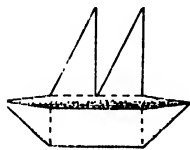
Sleep and rest, sleep and rest,
Father will come to thee soon;
Rest, rest on mother's breast,
Father will come to thee soon;
Father will come to his babe in the nest,
Silver sails all out of the west
Under the silver moon;
While my little one, while my pretty one sleeps.

Tennyson

Other poems suitable for recitation:—"A Voyage in the Armchair"—M. Riach's Recitation Book.
"Sailing"—Gabriel Setoun (M. Riach's Recitation Book). "Wynken, Blynken, and Nod"—Eugene Field,
in *Palmerston Readers*, Book II.

Paper Cutting—LIGHTHOUSE AND SEA

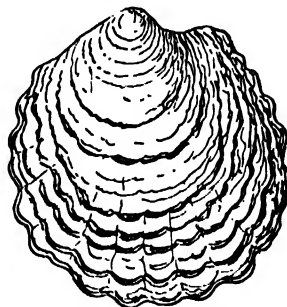
Sea, blue; rocks, brown; lighthouse, grey; lamp portion, yellow. If desired, the whole can be cut out of white paper and coloured in the brush-drawing lesson. If different-coloured paper is used, paste the sea on the mount first, next the rocks, and lastly the lighthouse.

Paper Folding—A SAIL-BOAT

Fold and crease until fig. 1 is obtained. Cut the vertical fold (middle) along the two upper squares. Fold back the diagonal in each oblong. Cut off the part of fold that extends beyond the edge.

Free-arm Drawing—ANCHOR

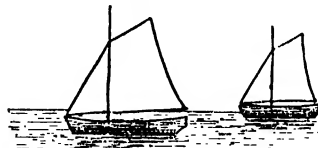
With both hands.

Clay Modelling—OYSTER SHELL

Follow the same steps as in the mussel last week. The markings should be made with a pin head, as those running across the shell are very strong. The bolder and rougher the modelling, the better the effect in this case.

Brush Work—LIGHTHOUSE AND SEA

Rock and lighthouse, brown madder; sea, blue; lights and rays, yellow.

Chalk Drawing—SEA AND SHIPS

Ships, brown; sails, white; sea, blue. Mark the water with faint lines of white for reflection of sails.

Object Lesson—THE TRAIN

APPARATUS REQUIRED.—Spirit lamp and kettle, models of engine, passenger carriages, and trucks.

PREPARATION.—Thoughts of the coming holiday are doubtless filling the children's minds. The country and the seaside are full of delight, but how are the children to get there? The distance is too far for walking. Tell children how people used to have to get from one part of the country to another by means of stage coaches, and show pictures.

PRESENTATION.—(a) **What Makes the Train Go?**—All moving things have some force behind them which, working, results in movement. Thus, the wings of the bird would be useless but for the muscles of the shoulder; a trap would have no value were there no horse to draw it; a cycle is useless unless the rider pushes the pedals.

The force behind the engine is steam, and this steam is so strong that when it is used in a certain way it can carry tons. Boil some water in kettle over the spirit lamp, and let children see how the force of the steam raises the lid. If the lid were fastened down and all ways of escape for the steam closed up, the steam inside would burst the kettle. Men have learned much about the strength of steam. They have built engines which make the steam work in the way the engine driver wishes. Many workshops and factories have their machinery driven by steam.

(b) **How the Steam is Made.**—In the same way as the steam in the kettle—by boiling water. In the case of the railway train a huge boiler is filled with water. The rounded shape of the engine is due to the shape of the boiler.

The water is heated by a fire, and it takes the fireman nearly all his time to attend to the fire. It is his duty to watch the "heat clock" or temperature dial. Let children see the use of this "clock". Where does

the smoke go from the fire? The children will be able to remember how, when going through a tunnel with the carriage windows open, the compartment became full of thick, choking smoke.

How are the driver and fireman shielded?

(c) **Parts of the Train.**—(i) *The Engine.*—This contains all the working or driving parts—fire, boiler, and machinery; besides these there are clocks to tell the time, heat of boiler, and speed of train. There are two thick glass windows through which the driver and fireman can look ahead. Why is the glass so thick and strong? Fastened to the engine is the coal wagon, plentifully supplied with coal.

(ii) *The Carriages.*—These combine several compartments. Each compartment contains comfortable seats and hat racks, doors, and windows with blinds. The compartments are heated in winter by means of pipes filled with steam supplied from the boiler.

(iii) *The Luggage Van.*—This is a huge compartment for carrying parcels, trunks, cycles, and anything passengers wish to take with them and which they cannot get inside the ordinary carriages.

(iv) *Guard's Van.*—This is usually at the end of the train. It is often wider than the other carriages, and has small windows in front and behind from which the guard can see all round the line.

(d) **Train Officials.**—(i) *The Engine Driver.*—His work is to control the engine and thus drive the train. He must be a skilled mechanic, who thoroughly understands his machine. It is his duty to see that the engine is kept clean and in order. He must watch the signals and obey them. He has to regulate the speed of the train. There are certain places, such as curves and bridges, where he has orders to go carefully and slowly. Other places he can whiz

through at regulation top speed. The driver obeys the flag and whistle of the guard, even if it mean drawing up the train away from a station. It is necessary that the engine driver be a steady reliable man when so many lives are in his care.

(ii) *The Fireman*.—He is the engine driver's companion on the train, and helps him in all matters relating to the engine. The fireman often knows a very great deal about the engine, so that in case of sudden illness of the driver he could bring the train to its destination quite safely.

(iii) *The Guard*.—The name expresses all the guard's duties.—He is the guardian of the train and its passengers. He is on the lookout all the time, while the passengers

are seated comfortably in their places. When danger is near, he gives the engine driver signal to slacken speed. He superintends the changing of the passengers and luggage. When he sees that all is right he gives the signal "right away!" and swings into his van the last of all. Without his signal the engine driver may not start the train. Teacher should draw the hand-rail which is fixed on the outside of guard's van to enable him to hold firmly as he steps into the moving train.

ASSOCIATION.—Associate with the tram-cars, buses, and motors in own town.

FORMULATION.—Complete summary.

APPLICATION.—See reading and manual work.

Phonetics

PART I.—*Exercises in Breath and Tone Control*. PART II.—*The "Paul au"*.

(i) "Paul Brown and his sister are starting on their holidays. Off they go to the station. Do you hear the station bell ringing? 'Cling, clang!' it sings. They must hurry or they will be late." Children imitate the sound and dramatize the pulling of bell rope. "Too late! They have missed the train and must wait for the next. What is that? Only the bell in the telephone box. 'Ting-a-ling, ting-a-ling!'" Children copy. "'Listen, Maud,' says Paul; 'did you hear the whistle? The train is coming.'" Children breathe in and whistle. "Here comes the train. 'Puff-t-f,' it says, like a tired animal." Children make puffing sound, and move their arms for wheel cranks. "'Jump in, Maud,' says Paul. The guard calls 'All

right there?' waves his flag, and the train is off." Children copy the guard's cry.

(ii) Teacher shows sketch of Paul with his spade and pail. His name is printed below—*Paul*. She tells class to spell or build his name, and shows them that the middle sound "au" is represented thus: "au". Children repeat the sound several times, and print the letters on their boards. They build words containing the "Paul au". Teacher asks how the sound is made.

Sentences for reading after word-building lesson: It is *August*. *Paul* and *Maud* are going away *because* they are not well. *Paul* has a net. Will he have a good *haul*? *Maud* will take a cup and *saucer* back for Dad. *Autumn* will soon be here.

Number

Number 12 continued.

(i) 12 months = 1 year. Children repeat the names of months of the year. They

chat about certain months and their special characteristics, e.g. December noted for Christmas, August famous for the holi-

days, April known for its sunshine showers. Teacher asks for names of current month and season. What is a season? How many months in a season? What part or share of a whole year is a season? Three months is one quarter of 12 months, \therefore 3 months is called one quarter. How many weeks in one month? How many in three months? How many in a quarter? Which is the nicest quarter: spring, summer, autumn, or winter?

(ii) 12 inches = 1 foot. Teacher refers to previous lesson, when children found that the footrule measured 12 inches (Spring, 6th lesson). Children look at their rulers and count the inches. Teacher gives them exercises in drawing lines of various lengths, e.g. $\frac{1}{2}$ foot, 3 inches, $\frac{1}{3}$ foot, 2 inches.

(iii) 12 hours = 1 day. In previous lesson

(mentioned above) children learned that 6 hours was half round the clock. 12 is 6×2 \therefore 12 hours must be the whole clock round. Teacher shows clock-face (cardboard) to children, who count the hours as she moves the hour hand round from 7 to 7, 3 to 3, &c. Children repeat: "There are 12 hours in 1 day". Teacher tells that later they will learn how many hours in a day and night.

(iv) 12 pence = 1 shilling. Taught by playing at shopping with cardboard money. Child asks shopkeeper to change his shilling, &c.

(v) 12 articles = 1 dozen. Probably already known to children. Teacher gives such exercises as the following: "How many eggs can I buy for 1d. when they are 1s. per dozen? Half a dozen pairs of socks: How many pairs? How many single socks?"

Story—GEORGE STEPHENSON

About a hundred years ago there was a little boy born in the north of England who was called George Stephenson. His father worked as a fireman at a coal mine, and had to take charge of a steam engine which helped to raise coal out of the mine. Little George used to watch the engine work, and liked to help his father to clean and rub all the bright parts of it.

He was never sent to school, and was soon old enough to earn a little money by minding cows in the fields. Here his mind was still full of the engine he liked so much. In his idle moments, he cut the stems of the tall plants, and with some soft mud he tried over and over again, until he made a very good model of the engine.

When he grew older he left off minding cows, and worked in the mine with his father. He had now more chance of learning about the things he liked best, and he made good use of his time. He taught

himself to do sums, and worked them out with a piece of chalk on the sides of the wagons. One day an engine, which was wanted to pump water out of a new mine, would not work. George came forward and asked if he might try to find out what was wrong. They let him try, and in four days he had put it right, and it worked better than before.

Later in his life, he made up his mind to try if steam engines could be used to draw heavy loads. Until this time heavy loads had been drawn by horses in trucks or wagons. This was slow work, and it was not long before George found out how to make a steam engine draw a very heavy weight.

After that, great changes were soon made. A railway was begun, and he had to look after the work. Here there was something to be overcome, for a great bog, called Chat Moss, lay right in the way. But George was not to be beaten. He had carts full of

rubbish thrown into the bog until it was firm enough to bear his iron rails, and then the first railway in England was opened. That was also the first railway in the world. Now railways run all over England like a

network of iron. They have made great changes in the country. People now go from place to place easily, and for this they must give great thanks to George Stephenson.

Other suitable stories:—"James Watt and the Steam Engine"; "Palissy the Potter", &c.

Song—"TRAIN SONG"

—Games from South Kensington (Curwen).

Game—OFF FOR THE HOLIDAYS

—Tune—"Riding down from Bangor."

1. Stand - ing on the plat - form, Wait - ing for the train,
Which will take To the sea a
Hark! hear the See the sig - nal drop;
Div - er puts the brak Then the train will stop.
Get in, get in quickly, See! the guard is waving;
There's no time to wait; He cries: "Off we go!"
Soon the train will start off, Engine driver answers -
Not a minute late. Now the sea, Heigh-ho!

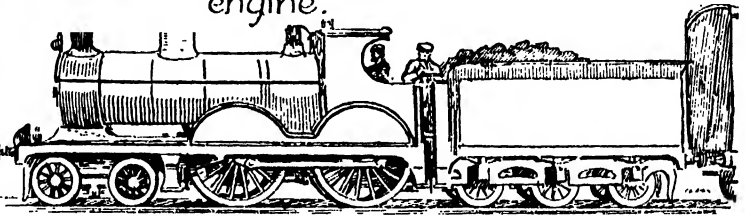
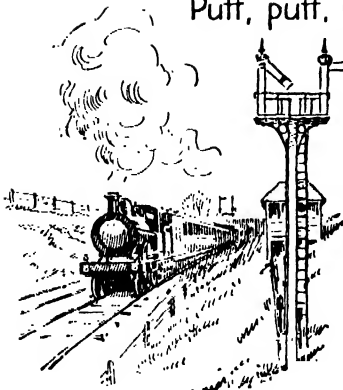
Directions.—*Verse 1.* A line should be drawn on the floor to represent the edge of the platform. Half the children, in single file, form a train, with two boys to act as engine driver and guard respectively. Let one child stand on a chair, and extend her arm for the signal. Choose several children for porters, newspaper boy, &c. The rest of the class are the passengers. At the beginning of the game the train stands in the farthest corner of the room. The train moves down the line, the engine whistle blows, the signal drops, and the speed slackens down until the train is alongside the platform.

Verse 2. The passengers board the train, i.e. they stand in single file with the "train" children. The guard walks along the standing train, and, blowing his whistle, waves his flag. The driver answers with the engine whistle, and the train begins to move off, slowly at first, but afterwards with increasing speed.

Blackboard Reading and Drawing

Puff, puff, puff! Here comes the train. It will take us to the sea-side. See what clouds of smoke are coming from the chimney. There must be a big fire under the boiler.

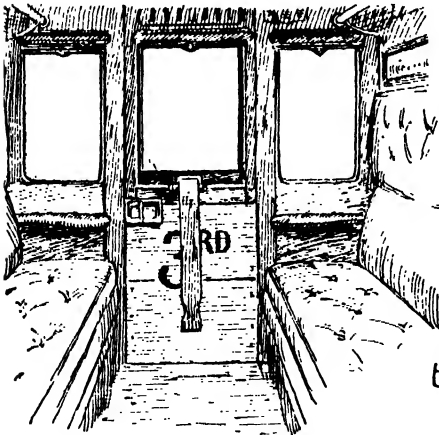
There is the coal waggon behind the engine.



How jolly it must be for the driver to

be able to make a big thing like the engine do as he pleases.

The porter calls out, "Train for Dashton!" We are going there, so this must be our train.

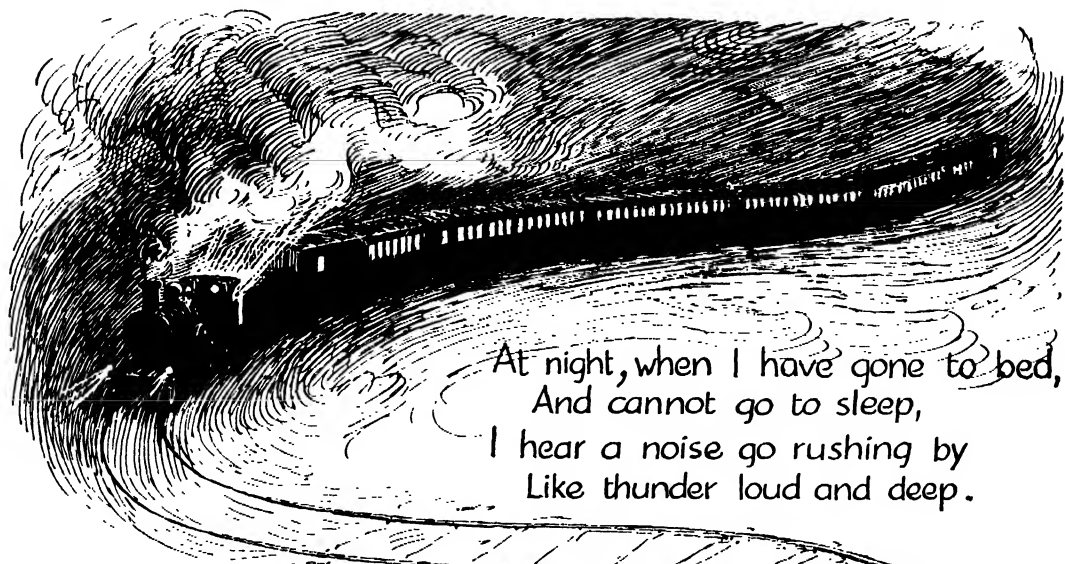


The porter puts our big heavy trunks in the luggage-van; then in we jump. Father puts his stick, mother's sun-shade, and Nell's umbrella up on the rack.

How cosy it is! Nell wants the seat by the window.

It is fun to see the trees and houses flying by. Oh, now dark! We are in a tunnel. Whiz! Whirr! Whiz! and we are in daylight once more.





At night, when I have gone to bed,
And cannot go to sleep,
I hear a noise go rushing by
Like thunder loud and deep.

It is the train, which dashes on
With noisy whirr and rattle.
It shrieks through quiet fields, and wakes
The gentle sleeping cattle.

Then like some monster, huge and strong,
Its two fierce red eyes gleaming,
It rushes, pushes, hurries on,
Its breath all hot and steaming.

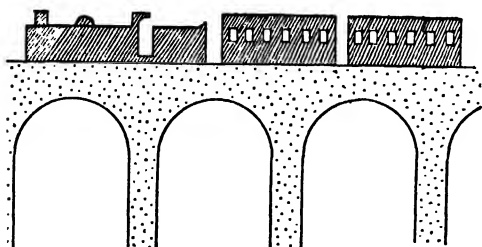
And then I fall asleep, and dream
That I am riding in it,
And see a thousand pretty sights,
Which do not stay a minute.

We scurry past the houses tall,
And give the beds a shaking,
Till tired little children say,
"It can't be time for waking!"

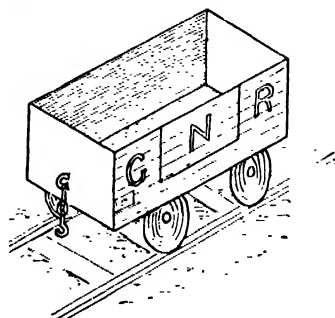
— M.B.

Another poem suitable for recitation:—"From a Railway Carriage"—R. L. Stevenson.

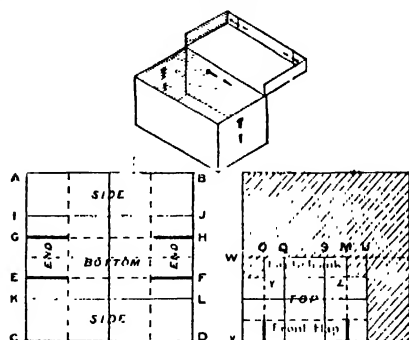
Paper Cutting—TRAIN AND ARCHES



Clay Modelling—GOODS WAGON



Paper Folding—TRAVELLING TRUNK

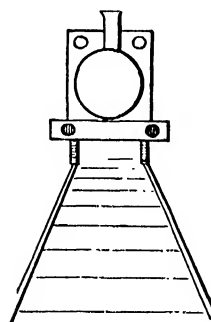


Trunk:—Fold into 16 squares. Fold CD to IJ to get EF. Fold AB to KL to get GH. Cut along thick lines and pin the ends. Dotted lines show where to fold.

Lid:—Provide a square of paper slightly larger than that used for trunk. Cut one-half away. Fold the other half in quarters, and cut one away. Fold UV to ST and get MN. Fold WX to QR and get OP. Cut along thick lines and fold dotted ones. Pin OMYZ to the back side of trunk.

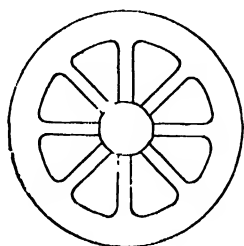
Break off piece of clay for wheels, and then proceed as for last week's newspaper basket. Mark wagon with name of line most familiar.

Brush Work—ADVANCING TRAIN

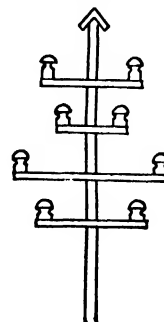


Colours as desired.

Free-arm Drawing—WHEEL OF TRAIN



Chalk Drawing



Colours as desired.

Object Lesson—THE RAILWAY STATION

APPARATUS REQUIRED.—Pictures of station, drawings of booking hall, footbridge, signals, and signal boxes.

PREPARATION.—Last week the children learned about the trains which were to carry them to the country or the seaside. Although these are so powerful, they would be of little use if there were no regular system of railways with stations along the lines. Compare with the trams in the children's locality, and show how valueless they would be if people did not exactly know where to get on them and where they would stop.

PRESENTATION.—(i) **What a Railway Station is.**—It is a place where people may board or leave trains. Intending passengers know the time trains are due at a certain station. It is the engine driver's duty to be at that station at the fixed time. Thus, with both officials and travellers ready, much confusion and fuss is avoided.

(ii) **Inside the Station.**—Stations differ in size and construction according to the population of towns and importance of districts which they represent. Some country stations consist of two lines only with two platforms, one tiny booking hall, and a box-like waiting room. Others, e.g. London stations, have scores of platforms, with their necessary waiting rooms, refreshment rooms, &c.

(a) *The Booking Office.* Here the intending passenger buys his ticket. Let children realize what a vast number of tickets the office must contain. Note how orderly the booking clerk must be—each ticket in its place, or confusion! Booking hall is usually at the entrance to the station; ask reason. Sometimes there is a rail built which will only allow one person to pass before the office window at a time; why? Show necessity for punctuality.

(b) *The Platform.*—This is where passengers wait for their trains. There are usually several platforms. The driver of a train, say, for Blackpool knows that he must drive his train alongside a certain platform where the Blackpool passengers are waiting. In some cases the platforms are some distance from the station entrance. Footbridges are provided so that passengers may cross the lines without fear of accident. Porters and railway officials do not use the bridges; why? There is usually a glass roof over the platform if the whole station is not covered; why? Seats are provided for the comfort of passengers. If all this is not sufficient, passengers can go into the waiting rooms.

(c) *The Waiting Room.*—Platforms are sometimes exposed and bare. Specially in winter there is a great need for the sheltered waiting room with its warm fire or other heating apparatus. The waiting room is provided with seats, chairs (in some cases), a table, mirror, &c. Besides this there are lavatories attached to the station, where the passenger may have a wash for a couple of pence.

(d) *Book Stall.*—In most stations there is at least one stall where newspapers, magazines, and books may be bought. This stall is very welcome to the traveller who has a many-hours' journey in prospect. When the train draws into the station, a boy from the newspaper stall walks down the platform with a basket of papers and books, so that people may not even have to leave their seats.

(e) *Refreshment Rooms* where people may buy refreshments. Sometimes a man from the refreshment rooms walks alongside a waiting train with a tray containing tea and biscuits.

(f) *Other Offices.*—Let the children tell

the use of all such offices as Left Luggage, Parcels, Telegraph, Stationmaster's, Porters', and Enquiry Offices.

(iii) **Outside the Station.**—Children can tell of the waiting cabs, newspaper boys, match sellers, and men and boys ready to carry parcels.

(iv) **Station Officials.**—At the head of all is the stationmaster, who superintends the whole working of the station, aided by inspectors. The inspectors supervise the work of the porters, and often help in that work. The porters attend to passengers' luggage, open and shut carriage doors, and call out the name of station. Then there are the ticket collectors, who collect or stamp

tickets. There are men, also, whose work it is to see that the wheels of the train are kept well oiled. The children will probably have seen these men carrying their oil can in one hand and lifting the lids of the boxes with the other as they examine a standing train. Ask why this examination is necessary.

ASSOCIATION.—Associate with trams, buses, or motor cars in the town.

FORMULATION.—If the lesson has been properly taken, the children will have seen how dependent we all are on each other. The railway station teaches, at least, one lesson, and that is "Help one another".

APPLICATION.—See correlated occupations.

Phonetics

PART I.—*Breathing and Tone Control Exercises.* PART II.—*The "jewel ew"*

(i) "Let us pretend we are in the train. It climbs a hill. Can you hear the engine, 'Sh-sh-sh-sh-sh,' as if it is saying, 'I *think* I can do it, I *think* I can do it.'" Teacher imitates the slow laborious sound of the engine, laying great stress on the second 'sh'. Children take a deep breath and copy the sound. "At last we have reached the top. How merrily the engine sings now, 'Sh-sh, sh-sh, sh-sh,' as if to say, 'I've *done* it, I've *done* it, I've *done* it.'" Teacher repeats quickly several times, laying emphasis on the second 'sh'. Children copy. "We are slowing down into a station. 'All tickets ready!' calls out the ticket collector." Children imitate the cry as exactly as possible, putting into their tones a good business-like briskness. Such exercises, if

properly done, help in obtaining expression in the reading lesson proper.

(ii) "The engine driver is proud of his engine. He calls it his jewel. Why? I wonder. Yes, jewels are very precious. Let us build the word 'jewel'. The first sound? Print it on boards. The last? Print 'el', but leave a space for the middle sound. What is the middle sound? Now here is a surprise for you. Here is the 'jewel ew'." Teacher produces card with 'ew' printed on it. "All say 'ew'. Print it. Now tell me how your lips make the sound."

Sentences for reading: Tom Lewis has gone to the sea. He went by train. The engine was 'The'. The smoke from it blew across the fields. Tom grew very hungry before the train drove into Margate.

Number

General work on number 12.

Nellie Smith is 6 years old. Her brother is twice her age. How old is he? They went off into the country for their holidays.

Will had saved 1s. Nellie had saved 9d. How much less had she than Will?

Will's railway ticket cost 1s. That was 1d. per mile. How far did he go? When

they had got halfway the train stopped at a station. How far had they to go yet?

At the farmhouse where the children stayed there were 3 horses. How many horseshoes altogether? One horse lost a shoe, another lost 2. How many shoes left amongst the three horses? The farmer took the horses to the blacksmith's shop. "Put a new shoe on the bay horse and two new ones on the grey mare," he said. The shoes were 4d. each. How much was the blacksmith paid?

Some ducklings were swimming in a pond. 6 white ones, 2 brown, and 4 spotted. How many altogether? Will shot his popgun; 3 of them were frightened, swam ashore, and waddled away. How many left?

Farmer Wilson's fowlhouse was 3 yards long. How many feet? It was 2 yards wide. How many feet? How many feet in 4 yards? Will peeped in the hencote and saw 12 tiny chickens. When they saw him a quarter of them ran away. How many left in the fowlhouse?

Will gets up at 7 in the morning. He has to go to bed at 7 in the evening. How long does he stay up? He had dinner at 12 o'clock one day. How long had he been up then? How many hours had he yet to stay?

When Will went back home, the train he was in went through a tunnel 6 miles long. It took 12 minutes for the train to get through. How many miles per minute did the train travel?

Story—THE LOVING BOY

When Willie was a very little fellow, he loved to sit upon his mother's knees, pat her face, and tell her how much he loved her. He used to say he loved mamma better than anyone else in the world.

As he grew older, he *did* the things he knew would please her, and not those things he knew would displease her.

If Willie's mother said, "Now, Willie, don't do that," he would not fret and say, "Why not, Mother?" He was quite sure his mother knew best what was good for him, so he would at once leave off what he was doing, and turn to something else. How jolly everything would be if there were more children like Willie!

When Willie was about six years old, his mother took him to the seaside. The little fellow had never been so far away before, so, of course, the first thing he did when they got in the train was to rush to the window. He said to himself: "Now, I shall be able to see the telegraph posts flash by and watch the frightened sheep run about in the fields. . . will be fun to see the swallows

race our train, and watch the lazy cows lift their heads slowly as if to ask, 'What is that mad rushing thing up there?' Then they will turn their heads again as if to say, 'It is far better to lie in the fields and chew sweet-scented grass'."

Willie was quite surprised when he heard his mother say: "Willie, dear, you must not do that." She would not even allow him to rest his arms on the window. She was just about to tell him why she did not wish him to do these things, when someone in the train spoke to her. When she had finished speaking, she had forgotten all about what she was going to say to Willie. On the seat in front of Willie a big boy sat, and he kept putting his head and arms out of the open window, although his mother had told him not to do so. Willie could not see any harm in doing what the big boy was doing; but as his mother had told him not to do so, he sat quietly looking through the window above the seat on which he was sitting.

Willie had a happy time. What a number of things he saw! There was a party

of boys and girls down a country lane gathering blackberries. When the train rolled by, they waved their handkerchiefs to the passengers. Willie had not time to get his, but he waved his hand back to them. Then there was a horse standing quietly by the railway embankment, which when it heard the train, galloped away. The trees waved their arms as if they were saying, "Do not fly so fast; take us with you!" A woman who was gathering potatoes from a field stood up and shaded her eyes with her hands. "Ah," she said, "there they go for their holiday. It will not be long before my playtime comes," and she bent once more to her work.

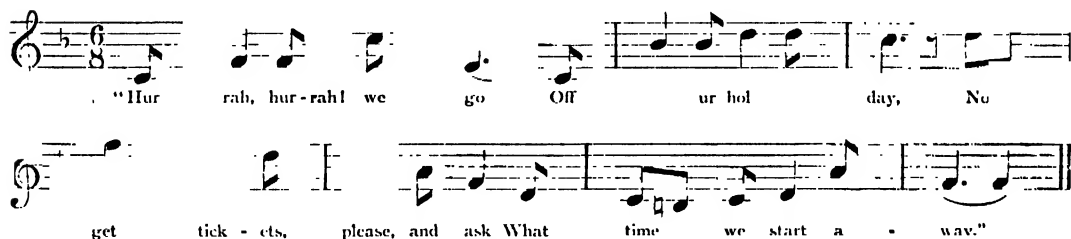
By and by the train rushed through a tunnel, and Willie saw the big boy jump backwards, while off went his hat into the tunnel. He had had a very narrow escape. It was indeed a great mercy that his head had not been taken off instead of his hat.

Willie now saw why his mother had given him warning not to put his head out of the window. He took his mother's hand and looked up into her face. She looked down upon him and smiled, as she patted his head, and made him feel very happy. She felt pleased, and said: "Are you not glad, Willie, that you obeyed your mother?"

Song—"THE RAILWAY STATION"

—*Games of To-day* Charles and Dible.

Game—THE RAILWAY STATION



2. "All tickets, if you please!
'For Blackpool,' did you say?
You start from platform number three.
Walk down the long subway."
3. The train is coming in;
We hear the whistle blow.
The porter opens wide the door;
Jump in, and don't be slow.
4. The station bell now rings;
'Tis time to start, I know.
The guard now waves his flag and sings,
"Away there! off we go."

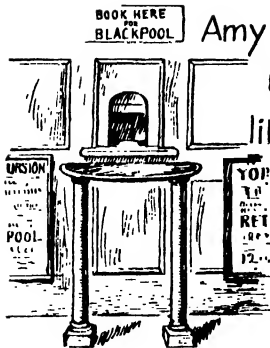
Directions.—*Verse 1.* A party of children enter the booking hall, which is denoted by a chalk line on the floor. One of them pretends to buy the tickets, which the clerk, another child, hands to him.

Verse 2. Before going on the platform (also marked out with chalk), the ticket collector stamps the tickets and points towards the subway.

Verse 3. The party walk down the subway, a lane made by two rows of children facing each other and holding hands above their heads. As the train, a line of children comes in, the porter opens a "door", and the holiday-makers step aside.

Verse 4. Some child rings the station bell, and the guard waves his flag, calling out "Away there!" The engine gives a whistle, and the train moves along.

Blackboard Reading and Drawing



Amy and Robert are going to the sea-side. Mother is in the booking-hall getting their tickets. What a funny little place she puts the money through! She is coming back. "Here you are!" she says. "Tear the tickets in two, one half for going away, and the other half for coming home." "I will take care of Robert's ticket," said Amy. She was older than

Robert and could read the words on her ticket. The other half read

L & Y RY CO.
BLACKPOOL

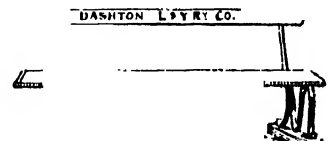
Which was she to keep?

66059
L & Y RY CO.
DASHTON
TO
BLACKPOOL

"Tickets ready!" called the collector, and he snipped a tiny hole in each ticket as the children passed through the gate.

"The train is not coming yet," said mother; "I will sit down." And she sat on a seat on the platform.

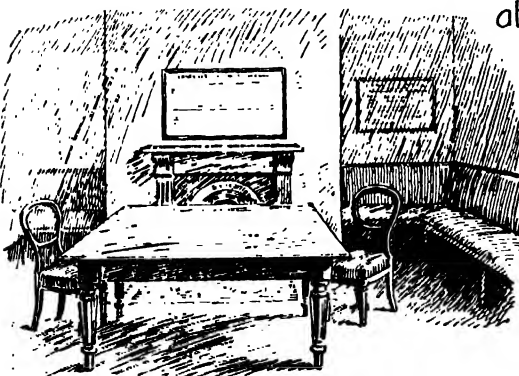
Amy and Robert went for a walk along the platform.



Amy laughed, when Robert wanted to put a penny in the slot to see how heavy he was; but Robert laughed

at Amy, when she said, "I would like to get some sweets." Then they looked in the waiting-room.

"Come! Come!" called Mother, "the train is coming. Goodbye, goodbye!" and she kissed them both.



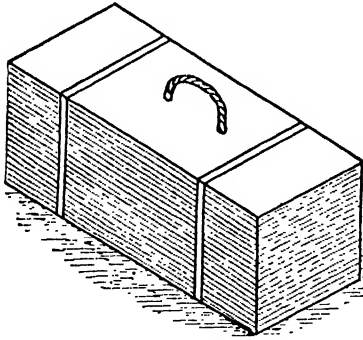
For blackboard poem use "The Train", in last week's scheme. If a fresh recitation be preferred, use "From a Railway Carriage", by R. L. Stevenson.

Paper Cutting—BOOKING HALL



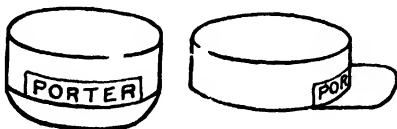
The rail and notice board should be cut out of a separate sheet of paper and pasted on.

Paper Folding—"TELESCOPE" SACHEL FOR THE HOLIDAYS



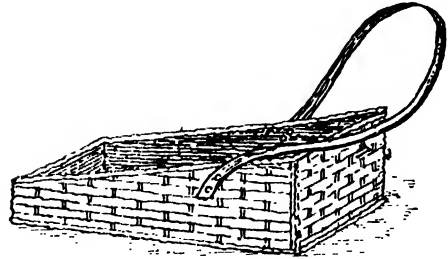
This is obtained by folding two boxes. One slightly smaller than the other is slipped inside the larger one. Let children tie the box with string or a tape.

Free-arm Drawing—PORTER'S CAP



(0241)

Clay Modelling—NEWSPAPER BASKET

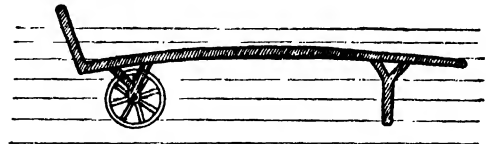


Steps:—Roll the ball of clay a little, and then make a rectangular prism by tapping gently on boards. Work up the deeper end of basket with fingers and thumb, pinching gently all the time. Imitate the wicker work with the clay-modelling knife. A strip of paper forms a good shoulder strap.

Brush Drawing—SIGNALS

Pole and arm, blue; top of pole, red; smaller circle, red; outer circle, white.

Chalk Drawing—PORTER'S CARRIER



Platform boards, red or brown; truck, yellow or green.

AUTUMN PERIOD



"Season of mists and mellow fruitfulness,
Close bosom-friend of the maturing sun;
Conspiring with him how to load and bless
With fruit the vines that round the thatch-eaves run;
To bend with apples the mossed cottage-trees,
And fill all fruit with ripeness to the core;
To swell the gourd and plump the hazel shells
With a sweet kernel; to set budding more,
And still more, later flowers for the bees,
Until they think warm days will never cease,
For Summer has o'erbrimmed their clammy cells."

'Where are the songs of Spring? Ay, where are they?
Think not of them, thou hast thy music too—
While barr'd clouds bloom the soft-dying day,
And touch the stubble-plains with rosy hue;
Then in a wailful choir the small gnats mourn
Along the river shallows, borne aloft
Or sinking as the light wind lives or dies;
And full-grown lambs loud bleat from hilly bourn:
Hedge-crickets sing; and now with treble soft
The redbreast whistles from a garden croft;
And gathering swallows twitter in the skies."

— *John Keats*.

Central Idea: "PREPARATION FOR THE WINTER"

PREPARATION OF MAN	{ The Harvest. Fruits.
PREPARATION OF BIRDS	Migration of Birds.
PREPARATION OF OTHER ANIMALS	{ The Squirrels. Snails.
PREPARATION OF PLANTS	Seed Dispersal. Plants which Store Food. Falling Leaves. Hips and Haws.

AUTUMN PERIOD

Object Lesson—THE HARVEST

APPARATUS REQUIRED.—Bunches of wheat, barley, and oats on stalks; rice, loose barley, and oatmeal; loose Indian corn and a cob of maize; pictures (see further in lesson); drawing of plough, a scythe, model of windmill; a basin, flour, salt, yeast, and water.

PREPARATION.—The summer is over, and winter will come; but between the warm summer and the cold days of winter there is a time—autumn—when all living things can get ready for those days when food is hard to find out-of-doors. Now the corn is ripe and ready for harvest, so men gather it in preparation for the days when the fields are bare.

PRESENTATION.—(i) **The Corn.**—Corn plants are a kind of grass. The corn grows and flowers just as the grass in the meadows does. Corn is the name given to all plants which grow in fields and supply grain for food. Thus maize, rice, barley, wheat, and oats are all called corn.

(a) *How the Corn Grows.*—In spring the ground was ploughed. Show Lucy Kemp Welch's picture, "Ploughing". The seed was sown. Show Millet's "The Sower". Refer the children to the lesson "How Seeds Grow" (Summer Scheme). If they planted wheat in the window boxes they will have followed its history, first as a green shoot,

and then as a corn stalk. The corn grass in the fields had tiny green flowers. When these died away they left the seeds behind them. The corn grew green and tall—taller than some of the children in the class. Then in the later days of summer it turned yellow, and the soft juicy seeds grew large and hard. There are many grains or seeds in one ear. Let the children pull one ear to pieces, and see for themselves that each grain is covered with a husk or shell.

(b) *How the Corn is Gathered.*—It is cut down by reaping machines. A scythe is used where the surface of the ground is very uneven. The corn is tied into bundles, and is carried away to have the grain beaten out of the husk. (Describe the process, and let the children dramatize.) The corn is then winnowed, i.e. the chaff is separated from the grain and driven away by means of wind.

(c) *How the Corn is Used.*—The corn is taken to the mill and ground. If wheat, it is ground into a fine white powder—flour. If oats, it is ground into oatmeal. Some time ago people used to have their corn ground by windmills. When the wind blows it turns the sails of the mill round. The force of the revolving fans drives the grinding machinery inside. But men found that

steam was a much better servant than wind; it could be made and kept under control, whereas the wind cannot be called or bidden; so they built corn mills, where the machinery is driven by steam.

The flour is put in sacks and carried to the shops, where it may be bought all through the winter.

The bran (husks) is carried away for food for cattle.

The long stalks have now become straw, and are used for floors of stables, &c. Let the children examine the stalks and find ridges or notches. These notches are where the leaves of the corn grass joined the stem.

Oatmeal is made from oats. The children will know oatmeal porridge well. How good it is on a cold winter morning! How good, too, are barley broth and soup on chilly days! Hens and chickens feed on barley when the frozen ground prevents them from scratching for other food.

Other corn which does not grow in this country is used for food. Mention rice for puddings, cornflour (made from maize) for dainty dishes, and maize for poultry.

(ii) *Bread*.—(a) *How Made*.—The teacher can best illustrate by kneading some dough for the children. They will, no doubt, have seen their mother mixing the flour, and will be able to offer suggestions. The flour is poured into the mug, and a hollow made in the middle. Into this the baker pours the yeast, which has been stirred in warm water. A little salt is scattered on the flour, and the

whole is stirred with a spoon. More water is added if necessary, and the baker kneads the mixture into dough. The dough is left to rise for a time, and then put into tins or rolled into loaves. When these have risen again they are put in the oven and baked.

(b) *Its Uses*.—Bread is at hand all the year round. It is a food which can be plentiful when fruit, vegetables, and meat are scarce. In winter the trees are bare—they shed their fruit in the autumn; the frost freezes the ground so that vegetables are hard to get; the sea is so cold and stormy that fishermen do not venture out often, and so fish is scarce. What should we do without bread?

ASSOCIATION.—Associate, if possible, with local cornmill or windmill and grocer's shop. Connect with what the children have learned from mother's cooking at home.

FORMULATION.—

"We plough the fields, and scatter the good seed on the land,

But it is fed and watered by God's almighty hand;
He sends the snow in winter, the warmth to swell the grain,

The breezes, and the sunshine, and soft refreshing rain.

"All good gifts around us are sent from heaven above,

Then thank the Lord, O, thank the Lord, for all His love!"

APPLICATION.—Free expression lesson; picture talks on Millet's "The Angelus" or "Harvest Home"; see also correlated lessons.

Phonetics

PART I.—*Breathing Exercise, with Arms Raising Sideways*. PART II.—*The "corn or"*.

(i) Starting position—Feet turned out at right angles, heels touching, upper part of body over hips, and weight of body resting mostly on fore part of feet. Arms to be held to sides, straight but not stiffly.

On the command: "Arms raising sideways—one!" the arms, stretched out full, are raised sideways very slowly until they are in a line with the shoulders, which should be kept down and drawn back. Wrists

should be held straight, and fingers stretched out fully with palms of hands downwards. Breath is taken in.

At "two!" the arms, still stretched out, are lowered slowly to sides, as in starting position. Fingers should be kept closed, and shoulder blades not allowed to move. Breath is expelled as the arms are lowered.

(ii) The teacher has no difficulty in introducing the word "corn", for the nature lesson for the week is the corn harvest. Teacher holds up a handful of corn, and asks children to repeat the word clearly. They find the middle sound "or" by picking out the first and last sounds. The two letters are treated

as one symbol, and must not on any account be separated. Teacher has previously prepared a drawing of sheaves of corn, with "corn" printed in corner. This serves as a record of the lesson. The children build other words containing "or", and then read the following from blackboard:—

"The cows are in the *corn*. Boy Blue is asleep in a *corner*. Where is his *horn*? What *sort* of *horn* is it? It is not gold *nor* silver. A *cord* is tied to it. The *corn* is short now. It will be *shorn* in the *morning*. The *horse* eats the ears of *corn*. It lies on *corn* stalks. A *thorn* by the *form* in the *porch* has *torn* Nell's frock."

Number

Number 13.

(i) The series below is treated in the following manner. Children have a bundle of 12 sticks each. They lay the bundles on their boards and write 12 underneath. They place another stick a little apart. Teacher asks them the addition stories, e.g. one child will say 12 sticks and 1 more make 13 sticks. Another says 1 stick and 12 sticks make 13 sticks. Children put 13th stick in bundle with the 12. "How many now? Take it out again. Sam, tell the subtraction story." Sam says, "1 stick from 13 leaves 12." Ned tells the other subtraction story, "12 sticks from 13 leaves 1 stick".

$$12 + 1 = 13 \therefore 1 + 12 = 13,$$

$$13 - 1 = 12 \therefore 13 - 12 = 1.$$

$$11 + 2 = 13 \therefore 2 + 11 = 13,$$

$$13 - 2 = 11 \therefore 13 - 11 = 2.$$

$$10 + 3 = 13 \therefore 3 + 10 = 13,$$

$$13 - 3 = 10 \therefore 13 - 10 = 3.$$

$$9 + 4 = 13 \therefore 4 + 9 = 13,$$

$$13 - 4 = 9 \therefore 13 - 9 = 4.$$

$$8 + 5 = 13 \therefore 5 + 8 = 13,$$

$$13 - 5 = 8 \therefore 13 - 8 = 5.$$

$$7 + 6 = 13 \therefore 6 + 7 = 13,$$

$$13 - 6 = 7 \therefore 13 - 7 = 6.$$

(ii) "There were 13 grains of wheat on one stalk. A hungry bird picked one of them off and flew away. It returned and took another, then returned and took one more. How often could it take 1 grain before all the grains were gone?"

Children demonstrate by moving 1 stick (calling it a grain of wheat) from their 13 for each grain taken.

$$13 \div 1 = 13 \therefore 1 \times 13 =$$

$$13 \div 13 = 1 \therefore 13 \times 1 = 13.$$

(iii) 13 means 1 ten and 3 units. Teacher holds up 13 sticks. How can she write the number down? Why cannot she put them all under the T? Why not all under the U? (See lesson on 10.) Difficulty is got over by dividing the 13 into two lots of 1 ten and 3 units.

Story—HOW THE CORN CAME FOR HIAWATHA

Hiawatha lived in the forest with his old grandmother, who was called Nokomis. While he was still a boy he learned the names of all the birds. He knew their language, and found out all their secrets—how they built their nests in summer, and where they hid themselves in winter. He called them "Hiawatha's Chickens". He knew where the squirrels hid their acorns, why the rabbit was so timid, and why the reindeer ran so swiftly. He called them all his brothers, and talked with them whenever he met them. Besides all this, he was a brave and clever hunter. His eyes were quick and his hands steady. The people all loved him; they called him "Mahn-go-tay-see," which means brave heart. Hiawatha was the strongest, and bravest, and best of all the young men. He was kind-hearted, and spent many hours thinking how he could make the lives of others better and happier.

One spring time he built a lodge in the forest by the side of the shining "Big-sea-water". This was so that he might stay by himself and pray. He prayed that his people might have other food to eat besides the wild fruit and the birds and beasts they killed with their arrows. Hiawatha thought that if he did not eat or drink for a week it would show how much in earnest he was, and then God would surely answer his prayers.

On the first day, as he walked alone, a deer sprang out of the thicket. Hiawatha, who was hungry, lifted his bow to shoot it, when he stopped. "No," he said, "I will not eat until I have found some other food for my people." He saw a rabbit in its burrow and a pheasant in the wood. He heard the squirrel rattling in his hoard of acorns, and watched the wood-pigeons building their nests in the pine trees. He heard a whirring and wailing in the sky, and saw flocks of wild geese returning to their last

year's home. Each time Hiawatha saw these things he put his hand to his bow, but he remembered his vow and walked on.

On the second day he wandered through the meadows by the river. Here he saw blueberries, gooseberries, and strawberries. He saw the wild rice, and smelt the fragrance of the grape-vine. He felt tempted to pluck them, for he was very hungry, but did not.

On the third day he sat by the lake, and as he looked into the transparent water he thought very deeply. The water was as clear as glass, and Hiawatha could see all the fishes in it. He saw the sturgeon leaping and scattering glittering drops of water about him. He saw the yellow perch, which looked like a sunbeam in the water. He saw the herring, the pike, and the crayfish; but not one of these did he try to catch, although he was very, very hungry.

On the fourth day Hiawatha was so faint from want of food that he could not walk out, but stayed in his lodge, weak and exhausted. The day had nearly passed, and the setting sun was painting the sky with glorious colours. Hiawatha lay on his couch, and gazed out of his wigwam door with half-closed eyes. As he looked, he saw a youth step out of the sunset glow and come towards him. He was dressed in green and yellow garments. His hair was soft and golden, and he had green feathers nodding and bending over his forehead.

At first Hiawatha thought he was dreaming, or that the sun had dazzled his eyes; but when the youth began to speak he knew it was no dream. "I am the friend of man, Mondamin. O my Hiawatha, all your prayers are heard in heaven, for you do not pray for selfish things, but for the good of others. You shall have what you pray for if you struggle and work for it. Rise, O youth, and wrestle with me." Hiawatha

started up weak and faint, and went out into the purple twilight. He wrestled with Mondamin, and, strange to say, he felt himself grow stronger the more and more he wrestled. They wrestled there together until the darkness fell around them. "'Tis enough!" then said Mondamin, smiling upon Hiawatha. "But to-morrow, when the sun sets, I will come again to try you." Then he vanished. It seemed to Hiawatha that he had sunk into the earth as the rain sinks, or had risen as the mists rise.

On the next day, when the sun was setting, Mondamin came again. He came so silently that Hiawatha did not hear him; indeed he seemed to spring out of nowhere. They wrestled together three times in the glowing sunset, until darkness fell around them once more. A bird called from the wood, and Mondamin paused to listen. He stood there tall and beautiful in his green and yellow garments, and the plumes on his forehead waved and nodded. Then he cried out: "O Hiawatha, bravely have you wrestled with me, and the Master of Life, who sees all, will give you the triumph." Then he smiled and said:

". . . To-morrow
Is the last day of your conflict,
Is the last day of your fasting;
You will conquer and o'ercome me;
Make a bed for me to lie in,
Where the rain may fall upon me,
Where the sun may come and warm me;
Strip these garments, green and yellow,
Strip this nodding plumage from me,
Lay me in the earth, and make it
Soft, and loose, and light above me.
"Let no hand disturb my slumber,
Let no weed or worm molest me,
Let not Kah-gahgee, the raven,
Come to haunt me and molest me,
Till I wake, and start, and quicken,
Till I leap into the sunshine."

As Mondamin said this he departed, and Hiawatha fell asleep. Next day his grandmother, the old Nokomis, came with food

for him. She begged him to eat, thinking that he would die of hunger; but he tasted not and touched not. Then she left him sitting there wearily waiting for Mondamin.

At last the youth came, and beckoned Hiawatha to come out and wrestle for the last time. Hiawatha was pale and haggard, and could scarcely walk. Bravely he struggled and wrestled with all the little strength he had left, until he suddenly found he was standing alone. There, before him, lay Mondamin dead, with feathers torn and garments tattered. Then Hiawatha made the grave as the youth had said, and laid him in the earth. He made the soft soil loose and light above Mondamin, and then went home to the lodge of old Nokomis. His days of fasting and struggles were over, but he did not forget Mondamin. Neither was Mondamin's grave forgotten, for the rain fell on it and the sunshine shone about it.

Each day Hiawatha waited and watched beside it, kept it clean from weeds and insects, and kept the dark mould soft above it. He drove away the ravens, who would have pecked the earth in search of food. At last one day a small green shoot appeared above the ground, then another followed, and another, until, before the summer was over, the maize had grown tall and beautiful. There it stood with shining green garments and soft yellow hair, and Hiawatha cried out in delight: "It is Mondamin! Yes, the friend of man, Mondamin!" Then he called old Nokomis and the people, and told them all about his struggles with Mondamin. Then he showed them how to strip off the leaves and husks from the maize, as he once had stripped Mondamin, so that they might have the corn for bread. Then Hiawatha

"Gave the first feast of Mondamin,
And made known unto the people
This new gift of the Great Spirit".

—Retold from *Hiawatha's Fasting*—Longfellow.

Other stories:—"Ceres and Proserpine". "Ears of Corn"—Grimm.

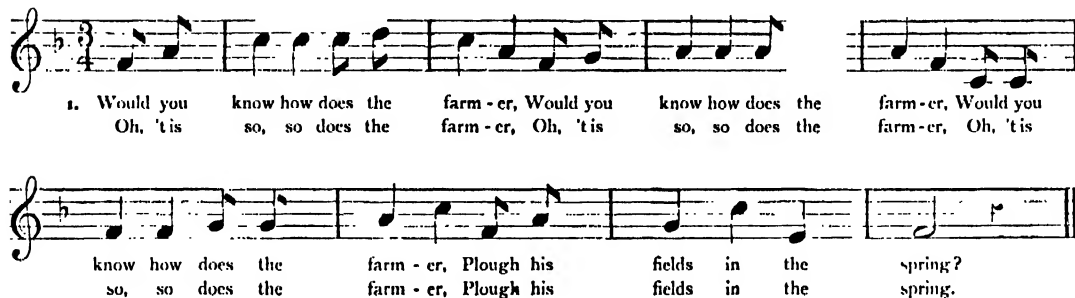
Songs—I. "HARVEST SONG"

—Songs for Little Children (Curwen).

2. "WE PLOUGH THE FIELDS AND SCATTER"

Game—HOW THE FARMER DOES

—Old Words and Tune.



1. Would you know how does the farm - er, Would you know how does the farm - er, Would you
Oh, 'tis so, so does the farm - er, Oh, 'tis so, so does the farm - er, Oh, 'tis

know how does the farm - er, Plough his fields in the spring?
so, so does the farm - er, Plough his fields in the spring.

2. Would you know how does the farmer
Sow his barley and wheat?
Oh, 'tis so, so, &c.

3. Would you know how does the farmer
Reap his barley and wheat?
Oh, 'tis so, so, &c.

4. Would you know how does the farmer
Thresh his barley and wheat?
Oh, 'tis so, so, &c.

5. Would you know how does the farmer
Sift his barley and wheat?
Oh, 'tis so, so, &c.

6. Would you know how does the farmer
Carry his barley and wheat?
Oh, 'tis so, so, &c.

7. Would you know how rests the farmer
When his day's work is done?
Oh, 'tis so, so rests the farmer
When his day's work is done.

Directions.—If children have seen Millet's "Sower", or "The Gleaners", the interest in this game will be all the keener.

Verse 1. The children stand behind each other, single file, in a circle. First child sings, "Would you know how does the farmer plough his fields in the spring?" All the children move round, singing, "Oh, 'tis so, so does the farmer", &c.

Verse 2. The second child sings, "Would you know how does the farmer sow his barley and wheat?" All the children then move round the circle singing and dramatizing "Oh, 'tis so, so does the farmer", &c., at the same time imitating with both hands the action of the sower.

Verse 3. The third child sings, "Would you know how does the farmer reap his barley and wheat?" Children move round in a circle singing and imitating the action of the reapers, &c.

Verses 4 and 5. Sung by fourth and fifth children. Ring-children need not move round for these verses.

Verse 6. As in verses 1, 2, and 3.

Verse 7. Children imitate tired and sleeping farmer.

Blackboard Reading and Drawing



I am a loaf of bread. Shall I tell you my story?

'Last spring the farmer sowed his corn. He carried the seeds in his hopper. This was a basket fastened with a strap round his neck. All spring and summer the corn grew green and tall.



When Autumn



came, the corn turned yellow.

"How pretty the golden corn looked when it nodded scarlet poppies!"

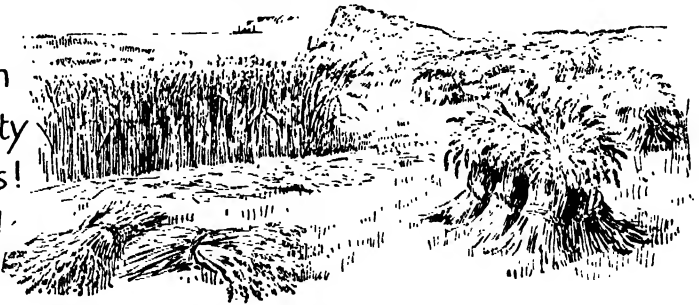
'Good-day!' to the

"Soon, it was ripe, and ready to be cut.

When it was cut, the corn was bound in sheaves and carried away to be threshed. The grain was taken to the mill.

'Have you ever seen a wind-mill? Wind-mills are not always used now; they are too slow.

Have you a corn-mill in your town? What a dusty white man the miller is!

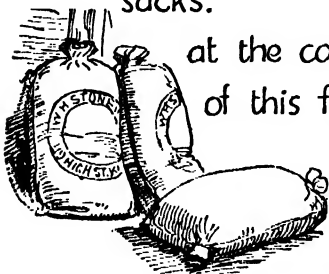


The corn was ground into flour and put into

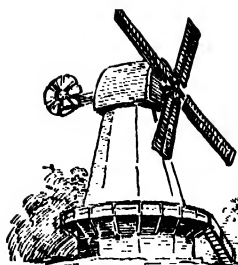
sacks.

"It was then carried to the grocer's shop at the corner of the road. Mrs. Brown bought some of this flour and put it into a big dish.

She kneaded it well and then rolled it into loaves. When they had risen, she put them in the hot oven. I was baked first, so Mrs. Brown took me out."



The Windmill.

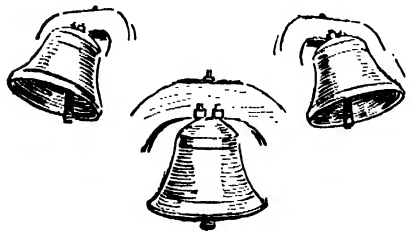


Behold! a giant am I;
Aloft here in my tower,
With my granite jaws I devour
The maize, the wheat and the rye,
And grind them into
flour.



I look down over the farms;
In the fields of grain, I see
The harvest that is to be,
And I fling in the air my arms,
For I know it is all for me.

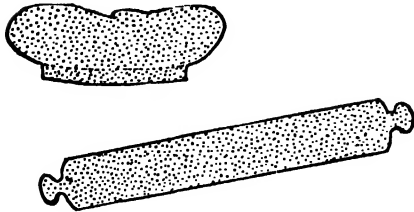
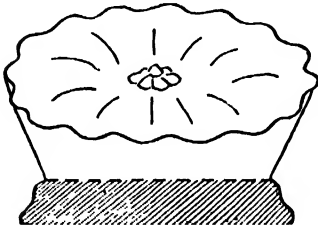
I hear the sound of the flails
Far off, from the threshing-floors,
In barns with their open doors;
And the wind, the wind, in my sails
Louder and louder roars.



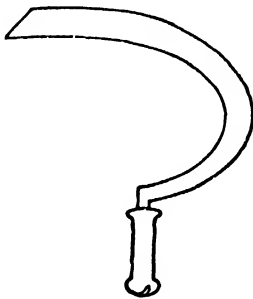
On Sundays I take my rest;
Church-going bells begin
Their low, melodious din;
I cross my arms on my breast,
And all is peace within.

— Longfellow

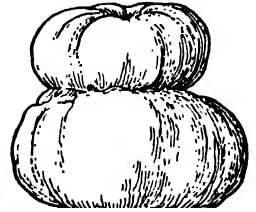
Other poems suitable for recitation:—1. "The Corn Song"—John Greenleaf Whittier (verses 4-7 inclusive). 2. "How the Corn Grew"—lines commencing "Day by day did Hiawatha Go to watch and wait beside it", to "And its long, soft yellow tresses", in *Hiawatha's Fasting*—Longfellow.

**Paper Cutting—BAKER'S HAT,
ROLLING-PIN****Paper Modelling - PIE**

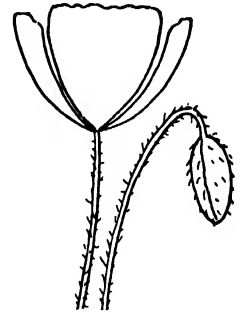
On a sheet of cardboard draw, with pencil or crayon, a wavy ellipse-edge of crust. Slant the two sides for sides of dish, and connect with line at which the model has to be folded. The shaded portion is for a stand. Colour the crust with crayon; leave the dish white.

Free-arm Drawing—SICKLE**Clay Modelling—COTTAGE LOAF**

Have a real loaf for a model. Break clay into two pieces. Work larger piece into ball with tips of fingers. Place in palm of left hand, and, with thumb of right hand, press for top portion. Make top portion similarly, and fit in depression of lower part. Pinch here and there to give a "real" appearance to the model.

**Brush Work—POPPY**

Show, by holding up flower, that in certain positions only half of the flower can be seen. That half is to be painted. Petals, scarlet; part of bud of the same colour. Stalks and bud, sap green.

**Chalk Drawing on Brown Paper—
EARS OF CORN**

Distribute ears of wheat, barley, or oats, and let children copy from natural specimens.

Object Lesson—FRUITS

MATERIALS REQUIRED.—As great a variety of fruits as possible for distribution among the children—apples, pears, plums, gooseberries (if possible), and tomatoes; acorns and nuts; chestnut burrs and poppy capsules; pictures of orchards and fruit gatherers.

PREPARATION.—Last week we saw how men gathered and ground the corn in preparation for the winter. The farmer picks his fruit just in the same way, and stores it for the time when there is not even a leaf on the orchard trees. Mother cannot keep plums and berries all the year round, as they are when plucked, so she preserves them by making them into jam.

PRESENTATION.—(i) **What Fruit Is.**—Fruit is that part of plants which contains the seeds. All blossoming plants and trees have fruit. The pretty pink-and-white apple blossoms drop their petals and grow into apples; the beautiful horse-chestnut flowers change into chestnut burrs; the sweet spring hawthorn blossom produces the bright haws of autumn; the scented pea flower grows into a peapod; the pretty rose loses its petals but becomes a scarlet hip; and the blossom of the corn grass changes into grains of wheat or oats. From this it will be seen that the word “fruit” does not mean only those seed cases which are pleasant to eat, but those parts of all plants which bear seeds. Remind the children of the dandelion “fruit”, and show that although they would not dream of eating it, the winged stalk carries a seed, and is therefore a real fruit.

(a) *How Seeds are borne by Fruit.*—(1) In cases inside the fruit. Let children name fruits, such as plums, cherries, apples, pears, &c. Nuts are fruits which might be mentioned by the teacher—the children will probably not think of them in this connection.

Plums, cherries, &c., usually have one seed shut up in a hard, stony case with a soft, juicy pulp around it. Birds are very fond of these fruits, and so the seed cases grow hard and strong in order to protect the seeds; otherwise birds might swallow them. Other fruits, such as walnuts, have a bitter rind for protection. Apples and pears have one or two seeds in tiny horny “rooms”; but these rooms are surrounded with such a thick mass of juicy pulp that it is almost impossible for birds to injure the seeds inside. Let children notice the hard skin of some pears, and ask reason. Nuts, such as the hazel and acorn, have the seed inside a shell without the soft, juicy mass which covers the stones of plums and cherries. The soft, fleshy fruits, such as the tomato and gooseberry, contain many seeds which are eaten almost without our knowing it.

(2) In cases outside the fruit; e.g. strawberry, blackberry, and buttercup. Show these specimens. If strawberries are over, make blackboard drawings.

(ii) **How Fruits Grow.**—One flower of apple blossom has a long green “cup”, which is really the seed case, although it is as yet only small. This cup has five green cup-leaves growing from the top of it. Inside the cup there are some tiny bodies ready to grow into seeds. When the flower is fertilized it dies and drops its petals, but the cup grows larger and larger. The little seeds begin to develop inside their cells, the walls of which grow harder and horny. There are five cells with about two seeds in each one. [Here the teacher can draw a section of apple blossom, and show children the position of the cup, cup-leaves, blossom-leaves, &c.]

By autumn the blossom-cup has grown so big that it is a round and juicy apple. Long

before this the cup-leaves withered away. Let the children find the remains of the sepals.

(iii) **Uses of Fruit.**—(a) Fruits hold the seeds of plants until they are ripe or ready to be carried to the ground. If the seeds fell to the earth when they first begin to develop they would no doubt die and be wasted.

(b) Fruit is valuable as food for most living things. Some fruits, such as nuts and bananas, are very good foods. Other fruit, such as apples and pears, besides being pleasant to eat, contain juices which are beneficial. Certain fruits which cannot be eaten are stewed or brewed for medicine; e.g. poppy capsules.

(iv) **How Fruit is Preserved.**—By the aid of sugar it is made into jam or bottled in syrup. Sugar is the preservative which keeps the fruit from going bad. Let children talk freely about the jam-making at home. They will tell how Mother boils the

fruit and sugar together for about an hour, then pours it into jars which she seals up tightly and labels.

ASSOCIATION.—In towns, connect with jam- or jelly-making at home; in the country, associate with the orchard harvest.

FORMULATION.—

“Lord of the harvest! all is Thine!
The rains that fall, the suns that shine,
The seed once hidden in the ground,
The skill that makes our fruits abound!
New, every year, Thy gifts appear;
New praises from our lips shall sound

“But chiefly when Thy liberal hand
Scatters new plenty o’er the land,
When sounds of music fill the air,
As homeward all their treasures bear;
We, too, will raise our hymn of praise,
For we Thy common bounties share.”

APPLICATION.— See correlated lessons. The children might plant grains of wheat or other seeds in the window-boxes; an acorn could be set in a tiny acorn glass.

Phonetics

PART I.— *Breathing Exercise with Arms raising upwards.* **PART II.**— *The “tart ar”.*

(i) Starting position: Arms held out sideways with palms of hands turned downwards.

On the command: “Arms raising upwards —One!” the palms are turned upwards and arms slowly raised until the vertical is reached. The arms and fingers must be stretched out fully. The palms face each other. Distance between the hands should be width of shoulders. Breath inhaled.

At “Two!” the arms are lowered to starting position with palms still turned upwards. Breath is expelled at the same time. At “One!” the arms are again raised; at “Two!” lowered, and so on, until the end of the exercise, when the command “Attention!” is given. The hands are then turned with palms downwards and arms still stretched out are brought to sides.

(ii) Teacher connects with nature lesson

on fruit. “Who likes apple tart? How does Mother make it?” Children chat briefly on the process. They build “tart” on the word-building frame with symbols printed on cardboard tablets. The middle sound “ar” is treated as if it were composed of one letter only. By substituting one tablet for another, the children change the word “tart” into “cart”, “part”, “dart”, “darn”, &c., on the word-building frame. After this they build words on their boards with chalk, e.g. harm, harmed, harmful, harming, harmless, &c.

Blackboard reading: The lard is not hard. Mother wants it for the tarts. Dart in the farmyard and bring the plums. Part of them will go in the tarts. Plum tart is good. A bit will not harm us. Jack cut his arm on the car. His sleeve was torn. It must be darned.

Number

Number 14.

(i) 14 means 1 ten and 4 units. (ii) Working of simple subtraction sum. (iii) Setting down of sum, e.g. 8 apples from 14 apples.

(i) This is treated in the same way as 13 (see last week's number). Teacher makes sure that the children understand the relative values of the units and tens positions by such questions as, "Which stand for more, the figure 1 or the 4? Why? Why cannot we put 4 under T and 1 under U? What would it mean if we did?"

(ii) Children have 14 counters each, arranged in two number-pictures, 10 (composed of two "domino" fives) and 4. Teacher asks question (see iii above). She tells them the easiest way to find out is to take 8 from 10 first. Children look at their counters and immediately say 8 from 10 leaves 2. Will there be more or fewer

left if there are 14 apples to begin with instead of 10?—More. How many more? Children look at counters again, and tell there are 4 more. What is left when 8 apples are taken from 14?—2 apples and 4 apples. How many is that?

Teacher writes on board the following. She makes sure that children understand it by giving them other sums to work, e.g. 14 - 7.

8 from 14 = 8 from 10 and 4. 8 from 10 = 2 \therefore 8 from 10 + 4 = 2 + 4 \therefore 8 from 14 = 6.

(iii) Children write 14 down first, 1 under T and 4 under U. Why put 14 down first? Because they cannot take away when there is nothing to take from. 8 is written under the 4; why? A line is drawn to separate the answer from the other figures. The answer 6 is written under the 8; why?

Story—ATALANTA AND THE GOLDEN APPLES

A long time ago, there lived a youth named Hippomenes. He was a handsome youth, brave and strong. One day he was walking through the woods with a friend. Summer had just gone, and autumn was painting the leaves with all her gay colours. The trees looked like princes as they stood there with their brown and yellow, crimson and gold leafy garments. "Look!" cried Hippomenes; "see that apple there in the sunlight; it looks like a ball of gold." As he said this a girl flashed by through the trees; so quickly she went that Hippomenes had only time to catch a glimpse of her face. It was such a lovely face that he fell in love with the maiden, and told his friend that he meant to marry the graceful runner.

"What! marry her!" his friend cried. "You cannot know who she is. She is the 'ing's daughter, the Princess Atalanta!"

It did not matter who she was, Hippomenes declared. He vowed he would marry her. His friend shook his head sadly, and told him he had made a foolish vow. "Do you not know," he asked, "that whosoever would have the princess for wife must, by the King her father's decree, run a race with her and win?" "That is nothing," declared Hippomenes. "Wait," said his friend. "The Princess Atalanta is the fleetest runner on earth. Scores of youths who loved the princess have raced with her and failed." "Ah, but I shall win!" replied the youth. "It is decreed," continued his friend, "that the youth who fails in the race loses his life." At this Hippomenes looked very grave, but he said: "Nevertheless, I am determined to try. I shall not lose; I shall win." "Hush!" cried his terrified friend; "do you not know that the Princess Atalanta is the proudest

maiden in all the world. They say she runs so swiftly in the races because she will not stoop to marry an ordinary man." The friends then separated, but Hippomenes could not forget the princess. "My Atalanta!" he called her, and "My fleet-footed fairy!"

One day a messenger came before the king, and, bowing low, said: "A youth seeks the hand of the Princess Atalanta in marriage." The princess leaned forward, and her face flushed with vexed pride. "His name?" demanded the king sternly. "Hippomenes," replied the messenger. "Let him be brought into the royal presence," demanded the king, and Hippomenes was shown into the Court chamber. He came boldly before the king, and, kneeling on one knee, bowed low. He looked a handsome youth as he knelt there; indeed, the Princess Atalanta could not help thinking so; but she hid her thoughts and looked coldly at the youth. She was dressed all in white, with gold bands on her arms and wrist, and her golden hair was fastened with a clasp of gold. As Hippomenes looked at her, he determined once more to win her for his wife.

The king told the youth the conditions on which he could marry the princess. "I willingly risk my life for a maiden so fair," said Hippomenes, as he bowed towards the proud girl, who started up angrily again; "but I shall not lose, I am determined to win." He then went to his godmother and told her all that had happened. "Dear godmother," he said, "help me to win the race or I must die." The old woman loved her godson very much, and promised to do what she could.

At length the day fixed for the race drew near, and Hippomenes went to see his godmother again. "See what I have for you," she said, and she put into his hands three apples made of pure gold. Hippomenes

drew his breath with admiration—the apples were so perfect; but he said sadly: "These are no good; the Princess Atalanta will say she is not to be bought," and he heaved a big sigh, because lately he had heard stories of Atalanta's wonderful swiftness in running. Some had told him that she could race even the wind. Then the old woman told him to carry them in his robe to the race, and when the princess was gaining on him, to throw an apple out of the path. "She will not be able to resist, and will stop to pick it up; thus you will get ahead of her." Hippomenes thanked his godmother and went home rejoicing.

The great day for the race had arrived, and the king had commanded all his Court to watch the running. The Princess Atalanta, surrounded by her maids of honour, was standing with a cold, proud smile on her lips—she felt so confident of winning the race. The young courtiers shook their heads sorrowfully. They, too, felt certain that Atalanta would win. The race started, and the two runners shot forward like arrows from a bow. The princess sped along so swiftly that the watchers said her feet must be winged. Hippomenes was falling behind when he remembered the apples he carried. He threw one out as his godmother had said, and Atalanta, seeing it, ran from the course to pick it up. She was so certain of winning that a few steps did not matter to her. But they mattered very much to the youth who was desperately straining forwards. A second time he threw an apple, and Atalanta stooped to pick the treasure up. These few steps lost did not matter much to her. But when Hippomenes threw the third apple, and the princess stopped a third time, she had lost too much to gain back again, and the boy reached the goal just before her.

There is little more to tell. The watchers were delighted, but not so delighted as

Hippomenes was with his newly won prize. she had loved the youth from the first day
The best part of it all was that, deep in her she saw him standing so boldly before the
heart, the princess was delighted too, for king.

Other stories:—"William Tell and the Apple". "Apple-seed John"—*Model Reader I* (Blackie).
"Apples of Iduna"—Norse Myth.

Song—"AUTUMN"

—*Song Garden for Children* (Edward Arnold).

Game—THE ORCHARD

Tune—"Comin' through the rye".

1. Au - tumn time has come at last, Sing, ha, ha! heigh - ho!

Gold - en sum mer days are past, Now the soft winds blow;

On the or - chard ap - ple trees, Sing, ha, ha! heigh - ho!

Brown leaves qui - ver in the breeze, Now the soft winds blow.

2. Apples ripe upon the bough,
Sing ha, ha! heigh-ho!
Ready to be gathered now,
Now the soft winds blow.
Bring the ladder 'neath the tree,
Sing ha, ha! heigh-ho!
Shake the fruit on Fred and me,
Now the soft winds blow.

3. See the apples ripe and red,
Sing ha, ha! heigh-ho!
Lying round where'er we tread,
Now the soft winds blow.
Catch the fruit so quickly falling,
Sing ha, ha! heigh-ho!
Hark! dear mother's voice is calling,
Now the soft winds blow.

Directions.—The taller children stand in groups representing apple trees; the smaller ones are the fruit pickers. One or two children can hide in a corner of the room and make a soft sound as of wind whispering. Choose a big girl for the mother.


Verse 1. All children sing this verse; at line 3 the "wind" blows. The tree-children twirl fingers for fluttering leaves.

Verse 2. Tree-children bring out from their pockets red balls from the babies' gift boxes. They hold them by the cords as if they were apples. When trees are shaken, the apples drop.

Verse 3. Children pick the apples up and put them in imaginary baskets or pinafores. When the mother calls, "Children, time to come home!" they all rush away with their treasures.

Blackboard Reading and Drawing



What is this? A sweet juicy apple which you would like to eat. Yes, but it is something more than that. It is a seed-house, where little seeds are packed away in tiny rooms. Cut the apple across, and see them.  How many rooms are there? Once, this apple was only the small green cup which held the pretty pink blossom-petals.



When the petals died, and the seeds began to grow, the green cup grew thicker and thicker.

Which do boys and girls like better, the seed-house or the seeds?

These are seed-houses to eat; but there are



which children like some they cannot eat.



Here is one. It

you see the windows it has opened all round under the roof? When the wind shakes the poppy seed-house, the little seeds jump through the open windows.

Mother is making jam this week. She says, "We must prepare for the winter when the fruit trees are bare." Tom and Nellie helped father to gather the plums.

They were! I pulled the Mother wiped the fruit.



Such fine plums stalks off and

What a lot of sugar mother used!

jam

Flo writes well, so mother said she could write the labels.



The Apple Tree.



What plant we in this apple tree?
Buds, which the breath of summer
days



Shall lengthen into leafy sprays;
Boughs, where the thrush with mottled breast,
Shall haunt, and sing, and
build her nest.



What plant we in this apple tree?
Sweets for a hundred flowery springs
To load the May wind's restless wings,
When, from the orchard row, he pours
Its fragrance through our open doors.



What plant we in this apple tree?
Fruits that shall swell in sunny June,
And redden in the August noon,
And drop, when gentle airs come by,
That fan the blue September sky.

While children come with cries of glee,
And seek them where the fragrant grass,
Betrays their bed to those who pass
At the foot of the apple tree.

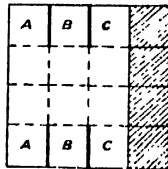
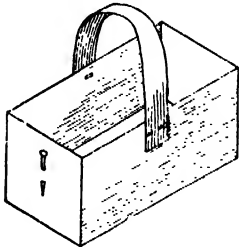


— W. C. Bryant.

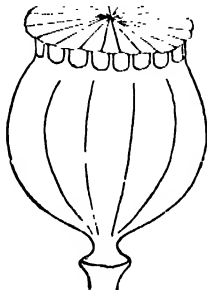
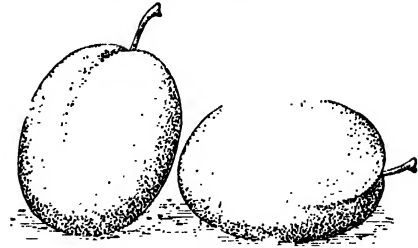
Other poems suitable for recitation:—1. "Mine Host of the Golden Apple"—Thos. Westwood, in *Model Reader*, Book III (Blackie). 2. "Cherries"—Emily H. Miller—*Recitations for Infant Schools*, by M. Riach (Blackie). 3. "Freddie and the Cherry Tree"—Emily H. Miller—*Recitations for Infant Schools*, by M. Riach (Blackie). 4. "The Fruit Tree"—Bjornestjerne Björnson, in Book I of *Palmerston Readers* (Blackie).

Paper Cutting—LADDER FOR GETTING FRUIT

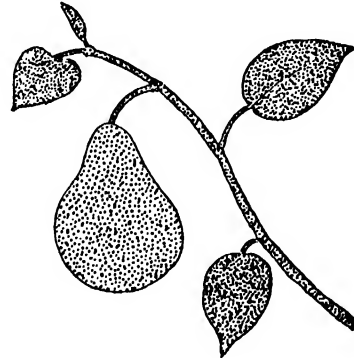
Fold narrow sheet of paper lengthwise, and cut out of folded edge the shaded portion.

Paper Folding—BASKET FOR APPLES

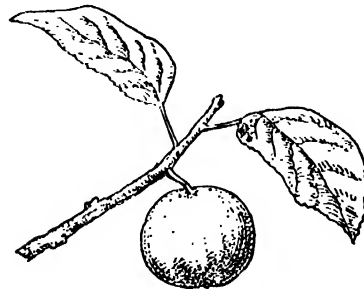
Fold a square into sixteen smaller squares. Cut off shaded portion for handle. Cut down thickened lines for length of one square. Squares A, B, and C wrap over each other for ends of basket. Pin or gum handle in place.

Free-arm Drawing—POPPY HEAD**Clay Modelling—PLUMS**

Provide bits of twigs for stalks, and give each child a real plum for copy. Steps:—Ball, ellipse, indentation down side (draw down the pricker flat--do not use point); stalks affixed.

Brush Work—PEAR ON BOUGH

Twig and pear stalks, Vandyke brown; leaves and pear, sap green; then, before paint on fruit is quite dry, introduce a little yellow on tip of brush. This will give it a mellow appearance.

Chalk Drawing—APPLE ON TWIG

Twig and stalks, brown; leaf and apple, green. Make a rosy cheek (or yellow, according to colour of specimen), by gently rubbing the required colour on one side over the green.

Object Lesson—MIGRATION OF BIRDS

REQUIREMENTS.—Pictures of birds migrating; specimens of as many berries as possible; models of birds; one or two wings.

PREPARATION.—We saw in the two previous lessons that autumn is the time when men prepare for the winter. Birds also get ready. How? Let the children tell how, just about this time, they have seen groups of birds flying around together or gathering in the trees. They were probably discussing the time of their departure to other lands. Birds cannot store food as men do. Ask what birds eat. Show that when the ground is frozen hard the worms do not rise out of their burrows, and seeds are hard to get.

PRESENTATION.—(i) **How Birds Prepare for the Winter.** They seek other places. The children know that in winter the swallows, cuckoos, nightingales, and other birds have gone—their twittering and songs are no longer heard. There are other birds, however, which are only to be seen in the winter months. Starlings, woodcocks, field-fares, and others come to us in the autumn and fly away before the summer. Why? Other countries have bleaker winters than ours, so that this country is as much a refuge to these birds as sunny Africa is to the swallows.

Some birds, e.g. robins and blackbirds, remain with us all the year round; but the robins we see in winter are probably not those we saw in summer. The winter robin has most likely flown to us from the colder north; he stays here all winter, and then flies back in the spring.

(ii) **Why Birds Seek other Places.**—Children will no doubt say because of the cold. This is not the chief reason; some birds, e.g. the swallows, are hardy, and not at all afraid of the cold. The main cause of their flight is that food is getting scarce.

Swallows feed on small flies, and so long as these are plentiful the swallows remain with us. Let children tell how they have seen these birds darting and skimming with open mouths catching their food. Many flies grow from grubs which live in water. If the weather is warm these are hatched into flies, but if the days are cold they do not develop. Remind the children of the numbers of small flies which are to be seen on a hot summer evening, and contrast with their scarcity in winter. This is why the swallows and martins, flycatchers and nightingales, migrate about the middle of September.

Other birds live on berries and seeds. These are not obliged to fly away when winter comes, because even in cold weather some food is to be had. Show the children some berries, e.g. mountain-ash, and ask them to name other winter ones, e.g. hips, haws, holly. Although the berry- and seed-feeding birds do not fly across the sea, yet they wander about from place to place in search of food. Some parts of the country where birds' food of this kind is most abundant are visited in winter by birds in greater numbers than were to be seen in the summer.

(iii) **How Birds Fly.**—(a) *Upwards by means of their wings.*—The bird strikes the air with its wings. The downward beat forces the bird upwards. Compare a boy jumping: his feet strike the ground suddenly, and, as it resists, his body gives way and rises in the air. But the bird has to raise its wings, and one would suppose this would counteract the downward movement and bring the bird lower again. So it would if the wing were not curved or arched with the hollow side underneath. Compare with an open umbrella in a storm. If the wind strikes the upper side the force

is not very great, but if it catches the under side the umbrella is either carried away or turned inside out. It is because the air cannot escape so quickly from the under side of the wing as from the upper that the bird rises in the air.

(b) *In certain directions by means of the wings also.*—Just as the oars drive a boat along and turn it or keep it straight in its course, so the wings of a bird make flight possible and guide that flight. The wings are made of long feathers called quills. These quills are not fixed firmly in the wings, but they can be turned a little way round if the bird wishes it. Illustrate by means of a feather in plasticine. When the bird makes the upward stroke it turns each quill a little, so that the air can pass between them easily. When the down stroke is being made, the quills are turned back, and, each one wrap-

ping slightly over the other, they form a broad oar, through which the air cannot pass, and which, pressed against it, pushes the bird onwards.

ASSOCIATION.—Associate with nature-study calendar (if one has been kept) and observations made by children from time to time.

FORMULATION.—Birds fly to other places when food is scarce. Their wings are curved to help them to fly. Their wings work like oars.

APPLICATION.—Commence a bird-observation calendar, and tell children to try and find the names of as many birds as they can amongst those which stay during the winter. If strange feathered visitors are noticed, write the description on the calendar, and state the birds' names, together with date of observation and names of children who saw them first. See also correlated lessons.

Phonetics

PART I.—*Breathing with Arms Sideways and Upwards Raising Exercise*

PART II.—*The "bird ir"*

(i) Starting position: Arms to sides, chest thrown out, &c. At the command: "Arms sideways and upward raising—one!" the arms are raised sideways and upwards. When the arms reach shoulder height the hands are turned so that the palms face upwards without impeding the raising of arms.

On "two!" the arms are lowered sideways and downwards, the hands turned downwards when arms are at shoulder height. Breath is taken in at "one" and expelled at "two". At "one!" the arms are again raised, and so on.

This exercise is done slowly. Immediately after the arms are raised they are lowered again. After the exercise has been practised with numbers, it can be gone through without, children following teacher's lead.

(ii) "Autumn is here. Food is getting

scarce for the birds, so the swallows are preparing to be off. Here is a picture of a flock of birds on the way to their new home." Teacher shows the record: drawing of swallows in flight. After the word-building lesson she prints *bird* distinctly on the record. "What comes out first when I say 'bird'?" Tom, put it on frame. And last? Put that on frame, but leave a space for the middle symbol. What is the middle sound? Here is the symbol for it." Teacher produces tablet with "ir" printed on it. "Tom, put it on frame. All say the sounds as I point." Children say "b-ir-d, bird". Teacher tells them that they will have to learn other ways of printing the sound "ir", so they will call this way the "bird ir".

Blackboard reading:—"What a *stir* in the *fir* trees! The *birds* are *chirping* 'chirp,

chirp!' The wind is blowing. It *twirls* the leaves, *whirls* the dust, and *stirs* up the dirt in the road. The *birds* will soon fly. The swallows go *first*."

Number

Further work on 14.

(i) Exercises are worked on the following with concrete objects, and then written as below in books or on boards.

$$13 + 1 = 14 \therefore 1 + 13 = 14$$

$$14 - 1 = 13 \therefore 14 - 13 = 1$$

$$12 + 2 = 14 \therefore 2 + 12 = 14$$

$$14 - 2 = 12 \therefore 14 - 12 = 2$$

$$11 + 3 = 14 \therefore 3 + 11 = 14$$

$$14 - 3 = 11 \therefore 14 - 11 = 3$$

$$10 + 4 = 14 \therefore 4 + 10 = 14$$

$$14 - 4 = 10 \therefore 14 - 10 = 4$$

$$9 + 5 = 14 \therefore 5 + 9 = 14$$

$$14 - 5 = 9 \therefore 14 - 9 = 5$$

$$8 + 6 = 14 \therefore 6 + 8 = 14$$

$$14 - 6 = 8 \therefore 14 - 8 = 6$$

$$7 + 7 = 14 \therefore 14 - 7 = 7$$

"Summer is over. The swallows are getting ready to fly away. There are 5 on the telegraph wires, and 9 more flying to them. How many altogether? They are

discussing when they shall leave this country. 6 want to go now, but the rest want to stay. How many want to stay?"

(ii) The meaning of fortnight: $7 \times 2 = 14$, $14 \div 2 = 7$. The word "fortnight" means "fourteen nights". The children will see that the first part of "fourteen" has been kept and the end dropped. "But we cannot have nights only! What must there be beside?" A day for each of the nights. "How many days then?" Children say, "There are 14 days in a fortnight." How many weeks is that? Children divide their 14 counters into 7's, and answer "2 weeks". They say, "Two weeks make a fortnight."

(iii) $2 \times 7 = 14$, $14 \div 7 = 2$.

The swallows flew away in couples. There were 7 couples. How many swallows?

(iv) $14 \times 1 = 14$, $14 \div 1 = 14$.

Eleanor watched the swallows every day for a fortnight. How many times did she watch? She watched them 1 hour each day. How long was that altogether?

Story—THE STORKS

On the roof of a house, the last in a little village, a stork had built his nest. There sat the mother-stork with her four young ones, who all stretched out their little black bills, which had not yet become red. Not far off, on the top of the roof, erect and proud, stood the father-stork. He had drawn up one of his legs under him, being weary of standing on two. You might have thought that he was carved out of wood, he stood so motionless.

In the street below a whole swarm of children were playing. When they saw the storks one of them began to sing:

"Stork, stork, fly to your nest;
Give your tired long leg a rest.
See your mate is sitting there
Watching all her young with care.
We'll hang one, we'll burn the other,
We'll roast the third, and shoot his brother."

"Oh, listen to those boys," said the terrified little storks, "they say we shall be hanged and burned." "Never mind," said the mother. "Don't listen to them; they can do nothing."

But the boys went on singing, and pointed their fingers at the storks. Only one little boy, called Peter, said it was a shame, and

that he would have nothing to do with it.

The mother-stork tried to comfort her little ones. "Never mind," said she, "see how brave your father is, standing there on one leg only."

"But we are so frightened!" said the little ones, drawing their heads down into the nest.

The next day the children sang again:

"We'll hang one, we'll burn the other,
We'll roast the third, and shoot his brother."

"Are we really to be hanged and burned?" asked the young storks.

"No, indeed!" said the mother. "You shall learn to fly: I will teach you myself. Then we can fly ever so far over the meadow."

"And what then?" asked the little storks.

"Then all the storks in the country will gather together, and the autumn review will begin. You must fly well then; for the general will stab to death with his bill those who do not. So you must pay great attention to me and learn very quickly. After the great review is over, we shall fly far, far away from here, over mountains and forests, to a warm country, where we shall have nothing to do but eat frogs all day long. And whilst we are so well off there, in this country not a single green leaf is left on the trees, and it is so cold that the clouds are frozen, and fall down upon the earth in little white pieces." She meant it would snow, but she did not know how to say it.

"And will the naughty boys be frozen to pieces too?" asked the young storks.

"No; they will not be frozen to pieces, but they will be nearly as badly off as if they were. They will be obliged to crowd round the fire in their little dark rooms, while we shall be flying about in foreign lands, where there are beautiful flowers and warm sunshine."

Time passed, and the young storks grew tall.

"Now you must learn to fly!" said the mother one day; and all the four young storks were obliged to come out on the top of the roof. Oh, how they trembled! And though they balanced themselves on their wings, they were very near falling.

"Only look at me," said the mother. "This is the way you must hold your heads; and you must place your feet so—one, two! one, two!" She flew a little way, and the young ones made a little spring after her; but, plump! down they fell; for their bodies were still too heavy.

"I will not fly," said one, and he crept back into the nest. "I do not want to go to warm countries!"

"Do you want to be frozen to death during the winter? Shall the boys come and hang, burn, or roast you? Shall I call them?"

"Oh no!" said the little stork; and he began to hop about on the roof like the others. By the third day they could all fly pretty well, and the mother-stork said, "Attend to me! One, two, three; now to the right! one, two, three, now to the left! Now round the chimney pot. That was very well."

Just then the boys came into the street, and sang again:

"Stork, stork, fly to your nest."

The young storks were very angry about it; the older they grew the angrier they were. Of all the boys in the town, the one most bent on singing the song was the one who had begun it, a little urchin not more than six years old. The young storks, indeed, fancied him a hundred years old, because he was bigger than their father or mother. "Never mind that boy!" the stork-mother said. "I must see how you will behave at the great review. If you should

fly badly then, and the general should thrust his beak into your breast, the boys will, at least so far, be proved in the right." When the young storks heard this they really took great pains, practised every day, and at last flew so prettily that it was a pleasure to see them.

Autumn came, and all the storks assembled to make ready to fly together to warm countries for the winter. What a practising there was! Away they went over the woods and fields, towns and villages, merely to show how well they could fly, for they had a long journey before them.

"Now, let us reward the little boy Peter," said the young storks.

"Very well," said the mother. "I know where the pond is in which the little human children lie until the storks come and take

them to their parents. The pretty little things sleep and dream more sweetly than they will ever dream hereafter. All parents like to have a little child, and all children like to have a little brother or sister. We will fly to the pond and fetch one for each of the boys who has not sung that naughty song and made fun of the storks." And the storks flew off to the baby pond.

In the morning when the children wakened they found that the storks had brought a little baby brother or sister to the house of those who had not sung the naughty song. The boy who started the singing wept when he found that the storks had left him a little child who had dreamed away its life. Peter was the happiest of all the children in the village, for the storks had brought him a little baby brother and a wee baby sister.

—From Andersen's *Favourite Fairy Tales* (Blackie & Son).

Song—"ROUND THE SPIRE"

—*Little Songs for Little Voices*—A. Scott Gatty (Metzler & Co.).

Game—GOODBYE TO THE SWALLOWS

- "Swal - lo tell why you fly, Skim-ming through the cloud - y sky?"

Lit - tle the day Whi we fly fra he

2. "Summer has not passed away;
Stay, oh, pretty swallows, stay!"
"Little ones, the wind blows bleak;
We our winter home must seek."

3. "Swallows, will you come again
After winter's snow and rain?"
"When the summer skies are clear
We'll return, oh, children dear!"

Directions.—*Verse 1.* A group of swallow-children dart out of one corner of the room and fly swiftly with outspread arms across the "sky". The remainder of children sing line 1. When the swallows answer they all point in one direction—"away from here".

Verse 2. Children advance towards the swallows, who are fluttering round, and sing lines 1 and 2. All shiver when the swallows answer, and gaze in direction of "winter home".

Verse 3. Swallows fly gently away. Children twirl fingers in imitation of falling snow, and make the p.ter of rain. The flying swallows turn their heads to reply.

Blackboard Reading and Drawing



1. See all those swallows in the sky; what are they doing? They are telling each other that flies are getting scarce.

One says: "Would you believe it? Last night, I had to dart and dive ever so long, before I had had enough supper." "Yes," they all twitter, "we will start tomorrow on our flight across the sea."

Good-bye, dear swallows! we will look out for you next spring.

2. The swallows leave us in the Autumn; but some birds come to us in place of them. These eat berries and seeds, so they can do without little flies. These are rowan berries. The blackbird says; "The swallows may fly to other lands to seek their food; but my food is close at hand. Who could wish for a daintier dish than glowing red berries!" The thrush says, "Give me ripe

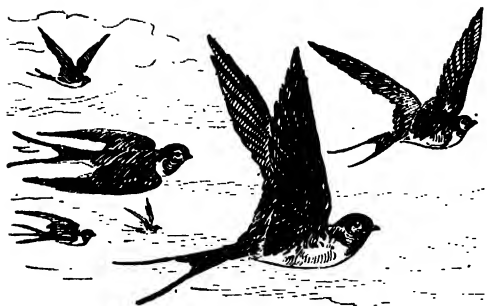


blackberries; they are fine!" Robin says, "Rose hips for me. Hurrah! for hips and haws." Oh, how the winter birds love the berries! They like to eat holly berries, and are not one bit afraid of the prickly holly leaves.



3. Why can the swallow fly so far across the sea? Its wings are long and strong. They drive the swallow through the air just as the oars drive a boat. Some birds can fly a hundred miles at a time. Is not that wonderful?

Autumn _



This is the way the birdies go:
When the winter winds begin
to blow,
They fly away from the ice
and snow,
To seek for a warmer
clime.

This is the way the leaves come down,
Red and golden, yellow and brown:
Softly and gently they cover the ground,
And hide the sweet flowers below.



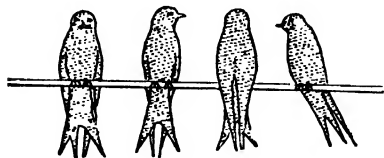
This is the way the flowers sleep
Under the leaves so brown
and deep;
Out in the spring-time again
they'll peep,
To gladden our hearts once more.

Other poems suitable for recitation :—

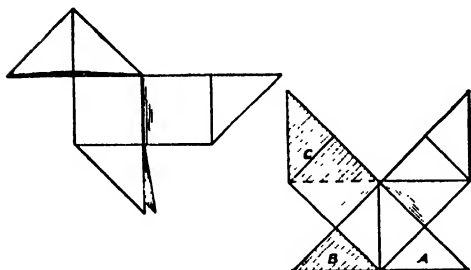
1. The brown birds are flying like leaves through the sky,
The flowers are calling, "Dear birdies, goodbye!"
The bird voices falling so soft from the sky
Are answering the flowers, "Dear playmates, goodbye!"—Kate S. Kellogg.

"Little Bird"—M. Child, in Book II of *Palmerston Readers*.

Paper Cutting—SWALLOWS DIS- CUSSING TIME FOR FLIGHT TO OTHER COUNTRIES

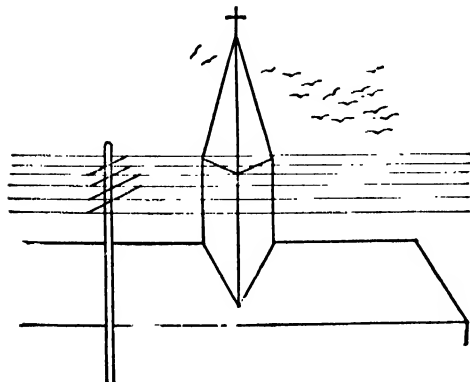


Paper Folding—FLYING BIRD



From the windmill ground-form get the vase (fig. 2). Fold back triangle B behind A. Fold C down for head along dotted line.

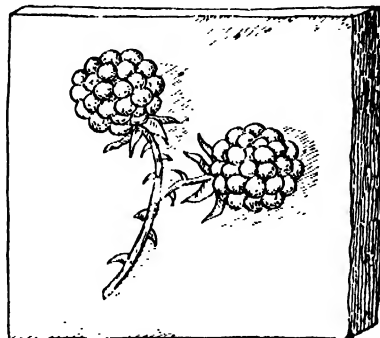
Free-arm Drawing—ROUND THE SPIRE



This makes good practice for straight lines.

Clay Modelling—BLACKBERRIES

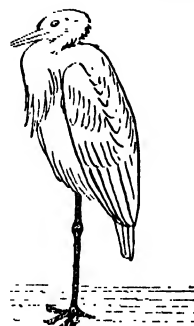
(A titbit for the birdies which stay with us.)



Give each child a specimen (real bramble). Let them make by fastening tiny balls to each other.

Brush Work—STORK (see Story)

Body (based on oval), white; beak and leg, yellow. Make water by drawing faint blue lines. Reflection of leg, yellow by means of short thick lines.



Chalk Drawing on Brown Paper— ROWAN BERRIES

(A treat for the feathered autumn friends.)

Berries, scarlet, with a touch of bright yellow; leaf, green; stalk, dark brown.



Object Lesson—THE SQUIRRELS

APPARATUS REQUIRED.—Model of squirrel; pictures of squirrels in woods; nuts and seeds; drawings of squirrels' teeth, claws, &c.

PREPARATION.—As autumn advances the days grow short and chill. Birds are migrating, and the wild animals in the woods seem to know that winter is coming. Farmers attend to their cattle in stormy weather, and children look after their pets, but those animals which live away from towns and people need to prepare themselves for the winter. Let the children name some of these animals. The busiest of all these is the squirrel.

PRESENTATION.—(i) **Appearance.**—The squirrel's body is about the size of that of a kitten; covered with reddish-brown fur—white underneath. Sometimes the colour of the squirrel's fur changes in winter to brown or grey, and frequently to white. Why is this good? The squirrel has a long bushy tail. This beautiful tail is not merely an ornament, it serves two purposes (see further in the lesson). Speak of its characteristic form, its position when running or leaping. The hind legs are long; this is the reason why the squirrel can spring and leap such long distances. The fore paws have four toes; one of the toes on each of these paws projects almost like a thumb. The squirrel holds his food between these paws, and, sitting on his haunches, he tears or nibbles it with his teeth. The toes have long sharp claws; why? The eyes are bright and dark; why bright? The teeth are strong and sharp; why is this necessary? Show by these facts that the squirrel is well adapted for its wild free life among the trees.

(ii) **Habits.**—(a) *Squirrels Live in the Woods.*—They spend most of their time in the trees. They can run from branch to

branch, leap from one tree to another, or spring great distances to the ground. The squirrel is very timid. When he is frightened, or if he is at the edge of a wood, he will leap from a high tree branch to the ground without hurting himself. He touches the ground almost as lightly as a falling leaf. Why is this? One reason is because his body is light, and another because, when the squirrel wishes to leap down quickly, he spreads his bushy tail as he springs in the air. This acts somewhat as the bird's wing, and prevents him from dropping heavily. (Refer to last week's lesson.)

(b) *Squirrels are Lively and Active.*—They are very playful. It is a pretty sight to see two squirrels playing together: they frisk this way and that, and run in a score of directions. They run so much together and turn and jump at the same moment that they are just like one squirrel playing by himself: it is hard to tell which is the leader.

(c) *They Live in Pairs.*—Squirrels are so fond of their partners that they live together year after year; in fact all through their lives. The female squirrel is very shy, and will not make friends as her mate sometimes does. In May they build a nest of twigs and moss and leaves. The entrance to this nest is always high among the branches. In June the little squirrels are born. They stay in the nest until they are strong enough to go out with their mother and learn to leap and run. (Compare with young birds.) When the young are old enough to run about, the mother teaches them how to find their own food. Should danger be near, the mother calls her children to her with a squeak or a kind of little bark.

(iii) **Food.**—Fruit of all kinds, beech, hazel nuts, and acorns, &c. In spring, when there are no nuts to be had, the

squirrel eats the buds and young shoots of trees. Sometimes he will rob a bird's nest by stealing an egg from it. This he cracks and, holding it between his forepaws which act as hands, he sucks out the inside.

(iv) **Provide for the Winter by Storing up Food.**—When a family have decided on their winter sleeping place, they set about stocking in their winter provisions. They are very wise in that they do not put all their nuts and seeds in one hole, but hide them in several places near their retreat. Sometimes the squirrel forgets where he has hidden some of his food and does not come back. It seems then as if the squirrel had worked for nothing; but this is not so. Sometimes the seeds sprout in their hiding places and grow into trees; thus the squirrel has planted trees or shrubs without even knowing it.

(v) **Sleep most of the Winter.**—Trees are bare, fruit is gone, birds' nests are empty, so there are no eggs, and therefore food becomes scarce. Then the squirrel, with his little store of food gathered in, scampers to his hiding place in a hole in a tree trunk, and goes to sleep. In this way he can live all through the winter on a very little food. Show children that they

would be extremely hungry if they had no food from getting up in the morning to going to bed at night, and yet they do without anything to eat hour after hour in the night whilst they are asleep. On mild winter days, the squirrel awakens, and, running to his little pantry, he makes a good meal. Then he goes back to his hole and, curling himself up again, goes to sleep. His lovely tail comes in useful again, for it wraps round his body and keeps him as warm as a blanket would.

ASSOCIATION.—Connect with what children remember about the young birds. Associate where possible with main idea of the two previous lessons, viz. preparation for the winter. Compare the care of parent squirrels with love of child's own parents at home.

FORMULATION.—Squirrels prepare for the winter by storing up food near the place where they intend to go to sleep.

APPLICATION.—Let the children repeat:

“Be kind to thy mother,
For, when thou wert young,
Who loved thee so fondly as she?”

For further application, see correlated kindergarten occupations.

Phonetics

PART I.—*Breathing and Arms Circling Exercise.* **PART II.**—*The “fern er”.*

(i) On the command, “Arms circling—one!” the arms are raised slowly forwards to horizontal position, with palms turned downwards. The palms are turned upwards, and arms continue to be raised until they are vertical. The head should be held erect, and back not allowed to hunch up. Breath taken in.

At “two!” the arms are lowered sideways and downwards. The hands are turned when they are level with shoulders,

so that the palms now face downwards. This turning of hands must be done without the sinking motion of the arms being interfered with. Breath is expelled. At “one!” the arms are again raised, and so on, until the children are able to do the exercise easily when they do it without numbers. The time taken for each breathing-in and exhaling to be the same as in ordinary respiration.

(ii) The word “fern” is introduced with a

chat on squirrels, and their homes in the woods among the ferns. Teacher may show symbol "er" and tell children to say "er", or she may wait until the sound occurs in a word which is being built. Here is another way of showing the same sound that the children had last week. The "bird ir" and "fern er" are both pronounced alike but spelt differently. In order to distinguish the "bird ir" and the "fern er" the children will call "er" the "fern er" for the future.

The record of lesson is a drawing of a fern with "*fern*" printed distinctly on it.

Blackboard reading: A *herd* of deer is in the woods. The *herd* looks after the cows. *Herbs* and *ferns* grow there. Frisky squirrel jumps with a *jerk* from one branch to another. *Bertha* says Frisky is *pert*. *Percy* says he cannot jump like Frisky; he has no *nerve*. *Ernest* can jump well and so can *Herbert*. Hear the squirrels *chatter*. They are *very merry*.

Number

Number 15.

(i) Addition and subtraction of numbers, with sum and subtrahend not exceeding 15, by means of counters or shells. Specimen questions:

"The squirrels are looking for their winter stores. One squirrel found 8 hazel and 7 beech nuts in one day. How many nuts?"

"A cartload of wheat sheaves passed through the forest. A wheatstalk fell out. It had 15 fine fat grains on it. 2 squirrels sprang to get them. One got 9 grains. How many had the other?"

(ii) $5 \times 3 = 15 \therefore 15 \div 3 = 5$.

"In a hole in a log lived Father and Mother Squirrel with their 3 squirrel children. How many in the family? How many in 3 such families?"

"Mr. and Mrs. Squirrel went hunting for

food. They saw 15 acorns in a hole. They had been hidden by another squirrel and forgotten. Mr. Squirrel stuffed an acorn in his mouth and held one in each paw. Mrs. Squirrel held one in each paw also. How many could they carry at once like this? How many trips would they have to make before they had moved the 15 acorns to their own home?"

(iii) $3 \times 5 = 15 \therefore 15 \div 5 = 3$.

"The wind was blowing through the forest. 3 squirrels sat on the branch of a tree swinging as the wind blew. When the other squirrels saw them they all scrambled on the branch until there were 5 times as many as at first. How many now?"

"15 squirrels lay curled up asleep in an old tree trunk. The sun was so bright that it wakened one-fifth of them. How many was that? How many still slept?"

Story—THE SANDMAN

There is no one in the world who knows so many stories as the Sandman, or who can tell them so well.

In the evening, when the children are sitting quietly at table or on their little stools, he takes off his shoes, comes softly upstairs, opens the door very quietly, and

throws sand in their eyes; just enough to hinder the children from keeping their eyes open and seeing him. He then glides behind them, and breathes lightly, very lightly, upon their necks, and thereupon their heads become very heavy. But it does them no harm, for the Sandman means it kindly.

He only wants the children to be quiet, and they are never quiet but when they are in bed and asleep. They must be quiet that he may tell them his stories.

When the children are asleep, the Sandman sits down upon the bed. He is gaily dressed; his coat is of silk, but of what colour it is impossible to say, for it seems now green, now red, now blue, according to the light. Under his arm he carries two umbrellas. One, which has pictures painted on it, he holds over good children, and then they have the most delightful dreams all night long; and the other, which has nothing on it, he holds over naughty children, so that they sleep heavily, and awake in the morning without having dreamed at all.

Now let us hear the story the Sandman told to a little boy named Hjalmar, to whom he came one evening.

As soon as Hjalmar was in bed, the Sandman touched with his magic wand all the pieces of furniture in the room. Thereupon they all began to chatter, and each piece talked only about itself. Over the chest of drawers hung a large picture in a gilt frame. The picture was a landscape showing tall old trees, flowers blossoming in the grass, and a river that wound its way through the wood and past many a grand old castle till it reached the sea.

The Sandman touched the picture with his magic wand and immediately the birds in it began to sing of autumn seeds and berries. The trees, dressed in green and gold, waved their branches to and fro. The clouds sailed by and cast their shadows over the fields below, where the corn had just been gathered in.

The Sandman then lifted little Hjalmar up to the frame, and put his feet into the picture. There he stood amid the tall grass. He ran to the water's edge, and sat down in a little boat that was painted red and white and had sails glittering like silver. Six

swans, with golden wreaths round their necks and bright blue stars upon their heads, drew the boat along close to a green wood, where the trees were telling stories about falling leaves and growing nuts. The flowers were telling of pretty underground fairies. They were saying when winter came they would go to sleep in the earth. Then the fairies come to them and tell them stories of beautiful butterfly princes who would visit them next summer dressed all in gorgeous robes.

Lovely fishes, with scales like gold and silver, swam behind the boat, every now and then leaping up so that the water was splashed over Hjalmar's head. Birds, red and blue, great and small, flew after him in two long rows. "Where are they going?" asked Hjalmar. "To lands across the sea," replied the Sandman. The gnats danced, and the cockchafers sang "Boom, boom." Furry squirrels chattered their story, and Hjalmar would have stayed to listen, but the little boat shot along. The worms and snails crept out to talk to Hjalmar, but he was gone before they could reach him. All things wished to go with him, and every one of them had a story to tell.

A pleasant voyage that was. At times the woods were close and dark; at others, like beautiful gardens beaming with flowers and sunshine. Large palaces built of glass and marble rose from among the trees. They looked so grand that Hjalmar wished to go inside, but the little boat sailed quickly past them.

At last it was time to turn back, and the six swans drew the boat homewards. What a change had taken place! The leaves were lying scattered on the ground and the trees stood still and bare. "Oh! are they dead?" cried Hjalmar. "No," said the Sandman; "they are all alive, but they are asleep. I am telling them stories of spring sunshine, and rising sap, and baby buds." "See!"

said Hjalmar; "the squirrels are asleep in their holes." "Yes, I have given them sweet dreams, too," said the Sandman. "Where have the snail and worm gone?" asked the little boy; "I saw them creeping about." "They are asleep, dreaming my dreams also.

I shower my dreams on all alike." "Have you sent one to me?" asked Hjalmar. "Am I dreaming too; and was the boat only a dream?" Just then he awakened to find himself in bed. A strange journey the Sandman had taken him that night!

—From Hans Andersen's *Favourite Fairy Tales* (Blackie & Son).

Other stories:—1. "Squirrel Mutkins"—Beatrice Potter. 2. "The Adventures of Bushy Tail, the Squirrel"—Z. A. R. Nesbit.

Song—"THE SQUIRREL"

—Songs for Little Children (Curwen).

Game—1. THE SQUIRRELS OF HAZEL WOOD



1. We are the squirrels of Ha-zel Wood; Skip! jump! and a-way! Hunt-ing for ha-zel nuts
ripe and good, Read-y for rain-y See them
Fine nuts spy; Squirrels, look spry! Skip! jump! and a-way!

2. Here on the hazel-boughs, swinging so high,
Chitter, chatter, and cheep!
First towards the earth, then up to the sky,
Next through the branches we peep.
Now play is o'er,
Gather our store,
Just one nut more,
Chitter, chatter, and cheep!

3. Down in the tree trunk snug and deep,
Squirrels young and old,
There we can huddle and go to sleep,
All through the winter cold,
When the spring sun
Wakens each one,
Then we have fun,
Squirrels young and old.

Directions.—*Verse 1.* All the children can be squirrels; if, however, this proves too noisy, select about half a dozen boys and girls to take the more active part, while the others sit quietly nibbling away at their nuts. All the children sing. Other actions are suggested by the words.

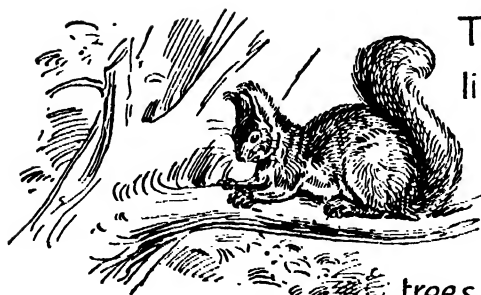
Verse 2. Children use arms as if they were tree branches swinging. At the word "peep" the squirrels peep through their own fingers. At line 5 they search busily for nuts.

Verse 3. All cuddle up and close their eyes as if for winter's sleep. At line 5 they awaken, look around, and begin to skip about.

Game—2. THE SQUIRREL

—*The Kindergarten Room*—Tristram (Blackie & Son).

Blackboard Reading and Drawing



This is Squirrel Spry. What a merry little fellow he is! He lives in the woods with his little wife.

Listen to the wind blowing through the forest. It roars among the trees and shakes the leaves from the branches. Squirrel Spry likes that; he says, "Blow on, old Gusty Wind you give me a nice swing. Make the trees tremble, for then they will drop their nuts." What is that? It is only an acorn; but Spry jumps down, scampers along the ground, and gets it. It will make him a good dinner. Squirrel Spry is



happy now. See him bite it with his sharp teeth.

He has teeth like Miss Gray Mouse. She is Squirrel Spry's



cousin. Do you know why squirrels' teeth are sharp? Look at the bottom of the page and see the long front teeth. Squirrels have sharp claws. They have to climb trees and hang on twigs.

In winter there are no nuts to be had, so Squirrel Spry gathers them now. He hides them in a hole in a tree trunk. Then he cuddles up in his cosy home, and goes to sleep. Sometimes, the winter sunshine wakes him. He says, "How hungry I am! I will eat a nut. Winter is not over yet, I will go to sleep again."





The Squirrels' Party.

Dar'ne Nature said;—"Dear leaves, come down;
You're needed now in Squirrel Town."

But each bright leaf just shook its head;

"We'd rather stay up here," they said.

Then Nature said: "Oh come, wind, blow,

For Winter soon will bring the snow,

And if no leaves fall down, alas!

Who then will cover up my grass?"

Stronger and stronger came the breeze;

Down fell the pretty dancing leaves.

And they said: "It is fun to be flying down;

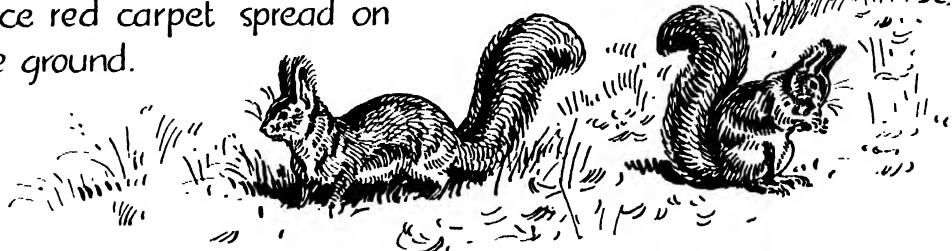
We will carpet all of Squirrel Town."

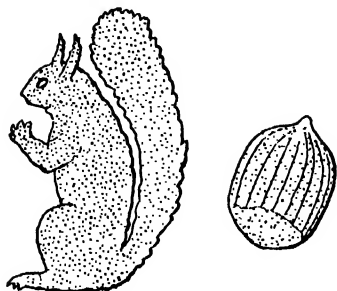
So away, and away, and away they flew.

Where some of them went to, nobody knew.

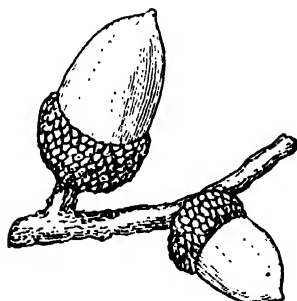
The Squirrels chattered with glee when they found

A nice red carpet spread on
the ground.

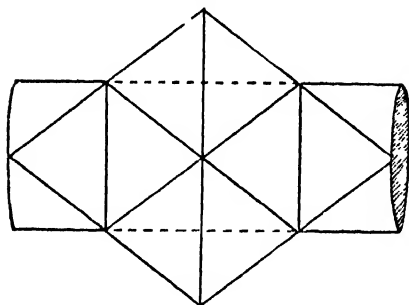


Paper Cutting—A SQUIRREL AND NUT

Use stuffed specimen as copy. Let the weaker cutters cut the nut; it is far easier.

Clay Modelling—ACORNS FOR SQUIRREL

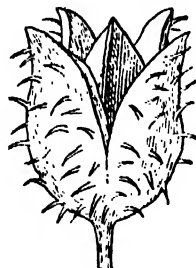
Cups and acorns should be made separately. Roughness on cup can be made with pin head. Provide bits of twig to give a natural appearance.

Paper Folding—MUFF OF SQUIRREL'S FUR

For description of methods for folding, see any "Kindergarten Occupation" handbook.

Brush Work—HAZEL NUT
(Squirrel's favourite dinner.)

Nut, brown; leaves, green.

Brown Paper Drawing—BEECH NUT
(Another dainty dish for squirrel.)

Husk, brownish green; nuts, bright brown madder

Free-arm Drawing—TEETH OF SQUIRREL

Object Lesson—SNAILS

APPARATUS REQUIRED.—Specimens of snails, snails' eggs where possible, glass for snails to crawl on, empty snail shells of varied designs, cabbage leaves, coarse file.

PREPARATION.—Last week the children learned about an animal which goes to sleep when winter comes. Snails and slugs are other animals which children know perhaps better than the squirrel; these also hibernate through the winter months.

PRESENTATION.—(i) **Appearance.**—(a) *The Shell.*—This is spiral. At the top it is small, but widens out into a sort of rim near the mouth. (Show empty shells, and let the children make a spiral in the air.) The shell is the snail's house, into which it draws itself for shelter from danger or uncomfortable weather. Because the shell is hard it acts as a protection for the snail against other animals, who would like to eat the soft body inside it. Some birds, however, have learned the way to crack a snail's shell and pick out and eat the snail. The shell is fastened to the snail's body, so is carried about with it wherever the animal travels. As the snail grows, the shell grows also. (Contrast with the crab—see Summer Scheme—which casts its coverings as its body grows.)

(b) *Body.*—This, although it is fastened to the shell within, can be thrust out considerably. The snail's body is soft; it has no bones. (Let children feel bones in their hands.) If the snail had bones it would probably not be able to squeeze itself into such a tiny house as that of the shell. (Children watching the snail creeping over a cabbage leaf will see for themselves how far it can protrude out of its shell.)

(c) *Skin* is wrinkled, soft, and slimy. Wherever the snail crawls it leaves a shiny track behind it. (Let the children see this.) This slime comes out of the snail's body.

(Show how it is likely to help the snail in its travels over rough and dry surfaces.) Snails can make threads of this slime—which is very sticky—by which they can travel from a tree twig to the earth. This slimy stuff is useful in another way (see further in lesson).

(d) *Head.*—The head is not very distinct. It is provided with two pairs of so-called horns. (Explain that these are not really horns, but feelers.) The large pair of tentacles in front and above has a black spot at each end. These are often called its eyes, although the snail cannot see at all clearly with them. If the children watch a snail carefully they will see that it appears to be unaware of any obstacles in its path. The snail can draw its feelers together or expand them at will. They are the organs of touch for the animal. When it is frightened the snail draws its eye-specks in. (Illustrate by touching the live snail.) The horns seem to be pulled outside in as this is done. (Imitate by pulling the tip of a glove finger inside by means of a hatpin, with the knob outside to represent the eyes at the tips of feelers.)

The mouth is on the under side of head. There are two lips. One looks a little like a tongue, and the other is set with a number of very small fine teeth. (Show drawing.) The tongue-like lip seizes the food and presses it against the teeth, which cut it up. The action is very much that of rasping away at the food. (Show a rasp, and let children see the snail's mouth by looking at the animal from underneath as it crawls along a piece of window glass.)

(ii) **Habits.**—Snails are fond of damp places. They live in holes of old walls, or even underground. Sometimes they may be found beneath stones or hidden under half-decayed leaves. They do not like the light and heat, but hide where there is any shade

during the day. They creep out and feed at night. They have not therefore much use for their "eyes". (Ask another reason why the snail chooses night for its journeys.—Its enemies, e.g. birds, are then mostly asleep.)

Snails feed on young plants, old vegetables, fruit, mushrooms, &c. (Show leaves which have been bitten by snails.) The snail bites off small pieces of leaf and grinds them with its file-like jaw. (In a very quiet room the children can, by putting their ears close to the snail, hear the rasping as the animal eats.)

The snail creeps along on the flat under part of its body. (Explain simply how, by muscular contraction, animals can travel without legs. Refer to worm. Let the children see this action by watching the snail creep over glass.)

It goes to sleep in winter. When the snail cannot find any food it sends out the sticky slime, which the children can see if they watch the snail. The slime hardens and makes a sort of door which closes up the shell. Now that the snail is safely out of sight it can go to sleep without food for weeks. The snail likes moisture so well

that in very dry weather it would be very unhappy if it could not close its shell-house "door" with this slime, and thus keep from becoming too dry.

ASSOCIATION.—Comparison with the squirrel.

- | | |
|--|--|
| 1. The squirrel is timid; when he is frightened he leaps out of sight. | 1. The snail is timid; when it is frightened it draws within its shell. |
| 2. The squirrel eats young shoots. | 2. The snail eats young shoots. |
| 3. The squirrel sleeps through the winter. | 3. The snail sleeps through the winter. |
| 4. The squirrel can do without food for a long time. | 4. The snail can do without food for a long time. |
| 5. The squirrel hides away in the hole of a log. | 5. The snail hides in cracks of old walls or holes in tree trunks. |
| 6. The squirrel wraps his tail round him, and thus keeps warm. | 6. The snail fastens its shell up with slime, and thus keeps warm. |
| 7. On mild winter days the squirrel wakens and makes a meal, then goes to sleep again. | 7. On mild winter days the snail crawls out and eats as much as it can, then it goes to sleep again. |

FORMULATION.—The snail is like the birds and squirrels in that it prepares for the winter.

APPLICATION.—See correlated lessons.

Phonetics

PART I.—*Breathing Exercise with Heels Raising.* PART II.—*The "burden" ur'*

(i) Teacher gives the command for starting position: "Hips firm!" Hands are raised quickly to hips, which they grasp firmly. Thumbs are behind, and fingers, which must be closed, in front. The wrists are kept well down and the elbows moderately back. The shoulders and elbows should be in a straight line; the former must not be allowed to lift.

On the command, "Heels—raise!" the children rise on their toes, keeping heels

together. The body should be in a straight line with the legs. Breath taken in.

At "Sink!" the heels are lowered to the ground and breath exhaled. This exercise is repeated to numbers, and afterwards without counting.

(ii) The word "burden" is introduced by reference to the snail (nature lesson for the week). The shell-house which the snail carries on its back is a burden. Children tell meaning of the word "burden". Teacher

asks them to put the word in a "little story", i.e. a sentence, to show that they understand its meaning. Here is another way of pointing the "ur" sound (pronounced "er"). To distinguish it from the "fern er" or "bird ir" they will call it the "burden ur". Children build the word on word-building frame, and teacher then shows record: a drawing of snail with "*burden*" printed on it. As a conclusion to lesson, children draw

any burden they can think of, and write *burden* under it, e.g. one child may draw a postman with his bag, or another a porter carrying a trunk.

Blackboard reading:—"Mr. *Burton* does not like snails. They *hurt* his *turnips*. They *lurk* under stones. See, he has got one! He *hurls* it away. The shell-house is a *burden*, but the snail does not *murmur*. When it sleeps it *curls* inside the shell."

Number

Number 16.

(i) The setting down and working of an addition sum, e.g. 4 snails + 5 snails + 7 snails. How many snails?

Children print T. U. on their boards. When teacher dictates "4 snails" she asks where 4 will go, and why. "5 snails more." Where does the 5 go? "7 more snails." Where is 7 put? Children draw a line "to separate the answer from the other figures".

7 + 5. This will probably be the first difficulty, but if the children have been thoroughly grounded in the numbers which, added together, make ten, they will simply work as follows: 7 snails are 3 short of 10 snails. 3 from 5 leaves 2. There are now 2 snails to add to 10 snails instead of 5 to 7. This is easily done: $10 + 2 = 12$.

$12 + 4$. Children work mentally $12 + 4 = 10 + 2 + 4$, which is 16, $\therefore 12 + 4 = 16$. The answer is written with 1 under T. and 6 under U. Children give reasons.

(ii) Exercises in addition and subtraction of numbers to 16.

"One evening, when it was growing dusk, 7 snails crept out from under an old wall. They meant to feast on some leaves in the garden. They were surprised to find 9 snails there before them. How many altogether? The gardener had noticed some of his pansy leaves eaten away. 'I will be even with those snails,' he said. He waited until dusk, and set out to catch them. He caught all the 16 but 5. How many did he get?"

"16 snails lived under a heap of stones. 3 and 8 and 2 of them sealed up their shell-doors and went to sleep. How many did not?"

N.B.—The children work these exercises on boards or in books before using concrete objects. These must not be used until the children have attempted the sums mentally.

Story—THE ELFIN HALL

Several large snails were creeping in and out among the clefts of an old tree. "Only hear what a racket there is in the old Elfin Mount yonder!" said one snail. "I have not been able to close my eyes for the last two nights." "There is something going on

certainly!" said the second snail. "There is a regular cleaning and dusting, and the Elf maidens are learning new dances. There is certainly something in the wind."

"Yes; I have been talking it over with an earthworm of my acquaintance," said a

third snail. "He has just come from the Mount, where he has been grubbing for days and nights together, and has overheard a good deal. He can't see at all, poor thing; but no one can be quicker at feeling or hearing. They are expecting distinguished strangers at the Elfin Mount; but who they are the worm did not know. All the will-o'-the-wisps are engaged to form a torchlight procession; and all the silver and gold in the Elfin Mount is being fresh rubbed up, and set out to shine in the moonlight."

Just then the Elfin Mount opened, and an old Elf maid came tripping out. She was the Elf King's housekeeper. Like all elves, she was hollow in the back. You see elves are intended only to be looked at in front. She was very quick on her feet—"trip, trip". Gracious! how fast she ran, straight down to the sea to seek the night-raven. "You are invited to Elfin Mount this evening," said she; "but will you not do me a great kindness and be the bearer of the other invitations?"

"Who are to be invited?" asked the night-raven.

"All the world may come to the great hall; even men, if they talk in their sleep, or do anything in our way. But the company must be very select for the feast; none but guests of the very highest rank must be present. The Mer King and his daughter must be invited first; they may not like coming on land, but I'll promise they shall each have a wet stone to sit on. All old demons of the first class, with tails, we must have, also the hobgoblins and the imps."

"Croak!" said the night-raven, and away he flew to bear the invitations.

The large state room in the Mount had been thoroughly cleaned and cleared out; the floor had been washed with moonshine, and the walls rubbed till they shone as tulips do when held up to the light. In the kitchen frogs were roasting on the spit; while other

choice dishes, such as mushroom seed, were ready or being prepared. These were to supply the first courses. Rusty nails, bits of coloured glass, and such like dainties were to come in for the dessert.

To make everything complete, the old Elfin King's gold crown had been fresh rubbed with powdered slate-pencil.

"Dear Papa," said the youngest of the daughters, "won't you tell us now who those grand visitors are to be?"

"Well," said His Majesty, "I suppose I may as well. My daughters are now old enough to be married, so the old goblin from Norway, who lives in the mountains, is coming here with his two boys, who are each to choose a bride. His sons, they say, are rather unmannerly, but they are sure to grow better as they grow older."

"When are they to be here?" enquired his youngest daughter again.

"That depends upon wind and weather," said the Elfin King.

Just then two will-o'-the-wisps came dancing up, each trying to go faster than the other, so as to get there first.

"They are coming! they are coming!" cried both.

"Give me my crown, and let me stand in the moonlight," said the Elfin King. And the daughters lifted their long scarfs and bowed to the earth.

There stood the Old Goblin, wearing a crown made of icicles and polished fir cones. He wore, besides, a bearskin cloak and great warm boots. His sons were with him, strong young fellows.

"Do they call that a hill?" said the younger. "In Norway we call it a hole."

"Have you no eyes, boys?" said the Old Goblin. "A hole goes in, and a hill stands out. Behave yourselves now, or people will think you have been very badly brought up."

And now they all entered the Elfin Mount.

Every possible arrangement had been made

for the comfort of each guest. The Sea King's family, for instance, sat at table in large tubs of water, and they said they felt quite at home. Everyone behaved well except the two young northern goblins, who so far forgot themselves as to put their legs on the table.

"Take your feet off the table!" said their father; and they obeyed, but not at once. Then they pelted the ladies who waited at table with fir-cones, which they drew from their pockets. But their father, the Old Goblin, behaved very differently. He talked delightfully about the grand Norse mountains. He told of the salmon leaping up from the wild waters while the water-spirit was playing on his golden harp; of starlight winter nights, when the sleigh-bells tinkled merrily, and the youths ran with lighted torches over ice which was so transparent that they could see the fishes whirling to and fro beneath their feet.

Then the young Elf maidens had to dance. First they danced simple dances, then stamping dances, and last, the "Dance out of the dance", which was most difficult of all. Bravo! how long their legs seemed to grow! and how they whirled and spun about! You could hardly distinguish legs from arms or arms from legs. Such whirling and twirling, such whirring and whizzing there was that it made one of the visitors quite dizzy, and at last he grew so unwell that he had to leave the table.

"Bravo!" cried the Old Goblin. "They know how to use their legs! But can they do nothing but dance?"

"You shall see what they can do," said the Elfin King; and he called his seven daughters to him. They could all do something wonderful. They took turns in showing their accomplishments; but even when six of them had stood before the Old Goblin he was not satisfied. And now came the

seventh and last; and she could tell fairy tales, as many as one could wish to hear.

"Here are my five fingers," said the Old Goblin; "tell me a story for each finger."

And the Elf maiden took hold of his wrist and told her stories, and he laughed till his sides ached. Then the Old Goblin said: "I will have you for a wife myself! Keep your other stories for winter; we'll hear them then, for we all love fairy tales in Norway. Then we will sit in our rocky halls whilst the fir logs are blazing and crackling in the stove. How merry we shall be! But where are the boys?"

Where were the boys? Why, they were racing about in the fields and blowing out the poor will-o'-the-wisps, who were just getting ready to make a procession of torches.

"What is all this riot for?" asked the Old Goblin. "I have been choosing you a mother; now you come and choose yourselves wives from among your aunts." But his sons said they had not the slightest wish to marry. So they made speeches, drank toasts, and turned the glasses upside down to show that they were empty. Then they took off their coats, and lay down on the table and went to sleep. But the Old Goblin danced round the hall with his young bride, and exchanged boots with her, because that is not so vulgar as exchanging rings.

"Listen; the cock is crowing!" exclaimed the lady housekeeper. "We must make haste and shut the window-shutters, or the sun will spoil our complexions."

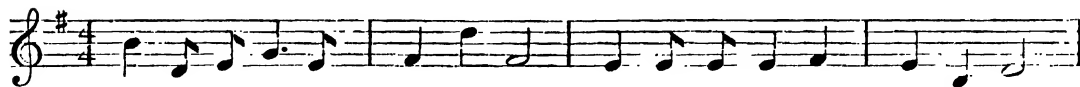
And then Elfin Mount closed.

But outside, in the cloven trunk, the snails kept creeping up and down, and one and all said, "What a capital fellow that Old Goblin is!" "For my part, I prefer the boys," said the earthworm; but he, poor thing, could not see, so his opinion was not worth much.

Song—"THE SNAIL"

—*Boston Songs and Games* (Curwen).

Game—THE TIMID SNAIL



1. Hold hands and make a ti - ny snail; Here is the head, and there the tail.



Look on the horns to find his eyes; See how the ten - der leaves he spies

2. When he is frightened, quickly then
He creeps into his shell again,
Fastens with slime his shell-house door,
Makes himself safe till danger's o'er.

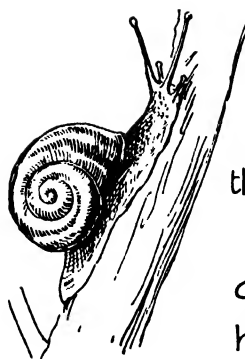
3. Now see him creep into his house,
Quieter far than any mouse;
For winter time is coming on,
When all the fresh green leaves are gone.

Directions.—*Verse 1.* Children stand in single file behind each other in order of size—taller ones first. They place hands on each other's shoulders. The first child thrusts out his arms and extends both his fore-fingers (horns). He moves about with a winding motion as if searching for food. The children follow him.

Verse 2. The teacher frightens the snail by clapping her hands. The snail winds inwards in a spiral. After a time the snail unwinds and slowly creeps across the floor.

Verse 3. Actions as in verse 2.

Blackboard Reading and Drawing



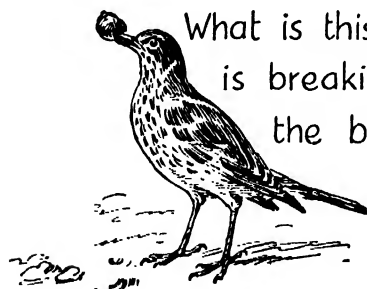
What funny things snails are! They have no legs, and yet can travel. They have a house, and yet they did not build it. It grew! They can carry their houses on their backs, and yet not be tired.

The snail is very timid. If anyone comes near, it will hide in its house. Touch



this snail. See, it has gone into its shell.

Its feelers are instead of hands. The snail feels for its food with them. Can you see those dark specks at the end of the long feelers? The snail can see with them, but not very well.



What is this bird doing? It has found a snail and is breaking the shell on a stone. When it breaks, the bird will pick out the snail and eat it.

Poor snail! you should have kept out of sight until it was dark.

This is a young snail.

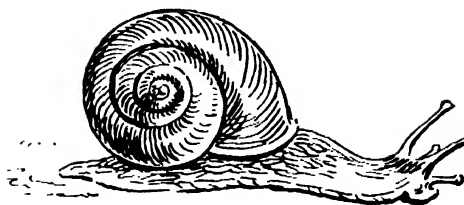
Its shell is not very hard yet. The gardener does not like snails. . They eat his green leaves.



See all these tiny teeth. They grind the food up for the snail.

Have you seen the trail of silver slime which the snail leaves behind it, when it crawls along? That slime is very useful. Do you know why?

The Snail.



Such a tiny, little snail,
Laying down its silver trail!
'Tis a carpet smooth and bright,
Which the snail, with house so light,
Travels over carefully,
With a motion slow and free.

When the winter time comes on,
And the tender leaves are gone,
Wise snail makes his door of slime,
To keep him safe through sleeping
time;
To keep him safe from
birds and harm,
All so cosy, snug and
warm.

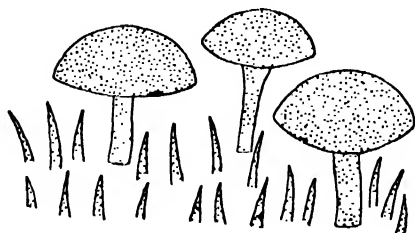


- Adapted from Snail game in
'Kindergarten Room' by F. Tristram

Another poem suitable for recitation:—"Divine Right"—Christina Rossetti.

Paper Cutting—MUSHROOMS

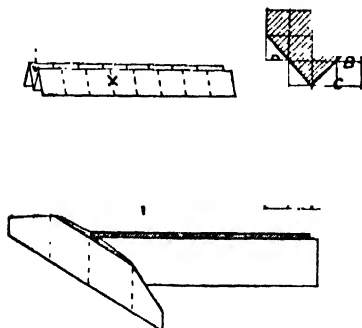
(A feast for the snail.)



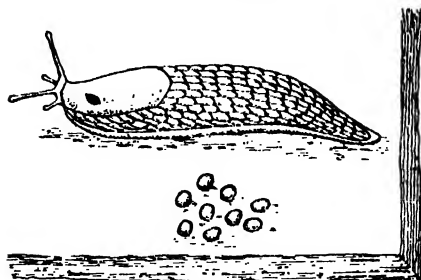
Mushrooms as near natural colour as possible; grass, green.

Paper Folding—GARDEN HOE

(The snail's enemy.)

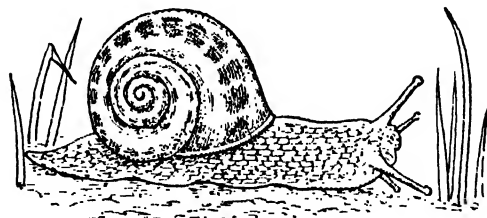


Fold oblong into squares, as indicated in fig. ii. Fold into firescreen, as in fig. iii. Hold near X with finger and thumb of right hand. Bring C up gently until fold BB lies along folds BC, when they are held with finger and thumb. Press flat, as in fig. i.

Free-arm Drawing—SNAIL AND OTHER SHELLS**Clay Modelling—THE SLUG AND ITS EGGS**

Roll out ball between finger tips until it is considerably elongated. Mark back with pricker point. Fix feelers last.

N.B.—If this exercise be thought too difficult, give snails' eggs for a model.

Brush Work

Shell, brown and yellow; snail, natural colour grass, green.

Chalk Drawing—A SNAIL VILLAGE

Old wall where snail sleeps, brown or grey; mushrooms, grey; grass, green; stone under which snails gather, grey or brown.

Object Lesson—SEED DISPERSAL

APPARATUS REQUIRED.—Each child to be provided with seeds of as many varieties as possible. Have amongst them: Pine cones, dandelion clocks, thistle heads, pods of broom or lupine, pea and bean pods, goose grass and burdock burrs, plums, hips and haws, and blackberries.

PREPARATION.—If possible take the children for a walk through a wood or park. Let them talk freely about what they see, and encourage them to pick up whatever leaves, seeds, nuts, or acorns may lie in their path. When they return they can talk of the signs of autumn in all these things. Show specimens, and tell the children that they are going to learn about the seeds and seed cases they have before them. Refer to lesson on fruit, when the children learned that fruits were seed cases.

PRESENTATION.—(i) **Why Plants have Seeds.** A plant has seeds so that it can have children to grow after it. The little ones will see that as old plants die there must be young ones to follow. In the flower lessons, in the summer scheme, they saw how a flower only lives till its seeds begin to grow, and then, its purpose being fulfilled, it withers.

(ii) **Why Plants Scatter their Seeds.**—Plants are fixed in the earth and have to keep in one place. If their seeds fell just around, no matter how numerous they were, only a very few would grow. Perhaps not one would develop fully. How is that? They would be so crowded together and overshadowed that they would be stifled and die. Young plants need space and air. It is necessary, then, that plants should scatter their seeds far and wide. They have all sorts of clever contrivances for doing this.

(iii) **How Seeds are Scattered.**—(a) *By the Wind.*—(1) *Winged Seeds.*—These grow

on plants high above the ground, e.g. trees. (Show a pine cone and take one or two seeds out.) Here is a seed fastened to a broad wing. When a strong wind is blowing in the forest the seeds are blown out of the cone. They flutter to the ground in zigzag lines and very slowly. How is this? (Cut the wing off a seed and show children how quickly it falls to the ground now.) Why is it best for a winged seed to fall slowly? The wind has a better chance of catching it and blowing it away. The wind can easily carry a seed if it has a broad wing. (Compare with sail of a boat.)

Show other winged seeds—ash, sycamore, elm, and birch.

(2) *Plumed Seeds.*—The dandelion “clock” is a collection of plumed seeds. (Refer to lesson on dandelion in summer.) Other plants, such as the thistle and groundsel, have feathery seeds. The wind carries them along and plants them in all kinds of places. This is the reason why dandelions and thistles grow in such profusion. It is the reason, too, why the groundsel and these plants grow in such odd places as crevices in old walls and roofs of buildings. (Blow a dandelion “clock” and show how lightly the seeds float along.) Make enlarged drawings of these seeds and tufts of “hair”.

(3) *Small Seeds shaken out of the Fruit by the Wind.*—In the poppy the seeds lie loose at the bottom of the fruit. (Shake a poppy head and let children hear the seeds rattle inside.) When the wind blows it bends the flower-stalk and jerks the fruit. The little seeds escape through the openings under the “cover”, and are thus thrown out on all sides. (See blackboard drawing on Fruits.)

(b) *By the Plants shooting them out.*—(Show pods of many kinds. Use broom as

a type.) These pods open down the middle if they are pressed. When the sun is warm the pods dry and crack open. They begin to twist like a corkscrew and nip the seeds. These manage to escape, but do so with such a force that they are flung far away. (Illustrate sudden jump by squeezing an orange pip between finger and thumb.) If the children were out on a hot summer day near the shrubs of broom they would hear the pods go pop! pop! as the seeds were fired off.

(c) *By clinging to Animals*.—These seeds or bundles of seeds are called burrs. (Show some goose grass and tell where it was obtained—in the hedges.) The seed boxes have grown tiny hooks all over them. There are so many of these hooks that when a child passes by a hedge he is sure to find many burrs clinging to his clothes, especially if he is wearing anything woolly. There may be dozens sticking to his stockings. But it is not children the burrs are waiting for; they rely on sheep and cattle to carry them to distant waste places where they may grow. Seeds of this kind would be useless if they grew on tall trees, and so they can only be found on low plants.

(d) *By Birds*.—Some seeds are wrapped in a sweet juicy pulp, e.g. the cherry and plum. Birds like this pulp, and so they carry off the fruit. But they cannot eat the seed, which is packed away in its hard shell, and so they drop it. This is all the cherry or plum tree wanted—to get her seeds carried far away, where they have a better chance of growing than if they fell at the foot of their mother tree.

The seed boxes of such plants as the rowan, rose, and hawthorn grow into bright berries. Birds eat berries, and are fond of them, but the little hard seeds do not die in the birds' bodies; they are cast out by the bird, and dropped far away from the place where they grew.

Thus it is seen that plants tempt birds, either by bright colouring or sweet taste, to carry off their seed boxes. Often in a bleak winter such berry-bearing trees as the yew, holly, rose, and hawthorn are bare before the old year goes out. These trees have, nevertheless, managed what they lived for, viz. to get their seeds carried far and wide.

Sometimes a bird will carry small seeds for hundreds of miles without knowing it. A little mud sticking to a bird's foot may contain tiny seeds; these are dropped in far-away lands, perhaps, and grow into fully-developed plants.

There is no end to the plans which plants adopt in order to get their seeds scattered. There are seeds which look so much like little animals that birds carry them off. They drop them, however, when they find out their mistake; and that is just what the parent plant wanted. There are sticky seeds which, by sticking to a bird's feathers, are carried long distances. There are also floating seeds which, like the cocoanut, are tossed about on the waves of the sea. When these are swept on the shore they prove themselves none the worse for their voyage by taking root and growing into trees.

ASSOCIATION.—Associate with lesson on fruit.

FORMULATION.—Seeds try in many ways to get themselves scattered. Some are blown about by the wind; some cling to animals and birds; some seed boxes are eaten by birds who drop the seeds afterwards; and some are shot out of their seed boxes.

APPLICATION.—Tell the children to bring to school as many kinds of seeds as they can find. Keep a record which contains a drawing of the seed, name of place where found, date of finding, and name of finder. Let the children plant some of the seeds in the school window boxes.

Phonetics

PART I.—*Breathing Exercise with Heels Raising and Knees Bending.* PART II.—*The 'g' sound.*

(i) Starting position: "Hips—firm!" (see last week's exercise). First command: "Heels—raise!" (for position see last week); breath inhaled. Second command: "Knees—bend!" The knees are bent slowly to a right angle. They must be turned well out and the heels kept together. The body should be upright, and not allowed to swing about; breath exhaled. Third command: "Upward—stretch!" The body is raised without swaying; and the knees are stretched slowly; breath inhaled. Fourth command: "Heels—sink!" During this movement the breath is exhaled. Teacher counts "one!" and children raise heels again; "two!" they bend the knees; "three!" knees stretched; "four!" heels sink; and so on.

(ii) Suggestion for introducing the word "magic": "The golden dandelion stood waiting, waiting. She had stood like this

for days. At last, what she was waiting for happened. Fairy Nature waved her magic wand, and in some wonderful way the seed boxes became filled with seeds." Children build the word. They may want to use "j" for "g", but before they can do so, teacher shows the symbol, and tells them that the magic "g" is a soft "g", and not hard like the one to which they have been accustomed. Words containing the soft "g" are built on word-building frame, after which the following sentences are read from the blackboard:—

"Mr. Oak is a fine old gentleman. He has stood there like a giant for ages. We must take off our hats to him. Let the winds rage. They will only blow his seeds away. The acorns are not large. Reggie is on the edge of the forest looking for some. He has a smudge on his serge coat. 'Oh, fudge!' he says; 'Madge will brush it for me.'"

Number

Number 16 continued.

(i) $16 \div 1 = 16$, $16 \times 1 = 16$, 1 is $\frac{1}{16}$ of 16.

"Uncle Fred had been in the country. He brought back 16 acorns which he had found scattered on the ground. 'Get me some acorn glasses,' he said to the children; 'one for each acorn. Fill them with water, and watch each day to see the green shoots.' How many acorn glasses did he require?"

(ii) $16 \div 2 = 8$, $8 \times 2 = 16$, 8 is $\frac{1}{2}$ of 16.

"The wind had been playing all day round a dandelion's head, which was at first covered with white silky hairs. But now only 16 were left. 'Come,' said the wind,

'I intend to make you bald.' It gave a puff and blew away half of the 16. How many such puffs had the wind to blow before the old dandelion was bald? How many white-haired seeds flew away at once?"

(iii) $16 \div 4 = 4$, $4 \times 4 = 16$, 4 is $\frac{1}{4}$ of 16.

"One day Uncle Fred set out to find all kinds of nuts to show his children. He put 4 nuts in each of his 2 trouser and 2 jacket pockets. How many did he carry in this way? He cut a quarter of them open so the children might see the seed inside. How many did he cut? How many left?"

(iv) $16 \div 2 = 8$, $2 \times 8 = 16$, 2 is $\frac{1}{8}$ of 16.

"16 winged seeds were blown off a sycamore

more tree by the wind. They fell to the ground. 'Oh, the pretty boats!' cried the children as they gathered them up. They called the seed wings 'boat sails'. Each seed boat had 2 'sails', and there were 16 'sails'. How many boats? There were 2

seeds in each 'boat'. How many seeds? The 16 seeds sank into the earth, but only $\frac{1}{8}$ of them grew into shoots. How many shoots?"

N.B.—Teacher lets the children work the above mentally before "proving" with concrete objects.

Story—THE PEA BLOSSOM

Once there were five peas in one pod. They were green, the pod was green, and so they thought that the whole world was green too. The peas sat all in a row inside the shell; they were more comfortable that way. As the shell grew the peas grew. The sun and rain fed the shell, and it became big and clear. The peas grew bigger every day, and, as they had plenty of time for thought, they wondered what they should do when the time came for them to go out into the world. "Are we to sit here for ever?" asked one. "We shall soon become hard at this rate. I am sure there is something outside."

The weeks went by, and the peas became yellow and the pod became yellow. "All the world is turning yellow," they said; and perhaps they were right, for it was autumn. Suddenly they felt a pull at the shell; it was torn off and slipped into a jacket pocket along with other pea pods. "Now the pod will soon be opened," said one, "and we shall travel." "I wonder which one of us will travel farthest," said the smallest pea. "What is to happen will happen," said the largest pea."

Crack went the shell as it burst, and the five peas rolled out into the bright sunshine. They lay in a little boy's hand. He held them tightly and said, "What fine peas to shoot!" Then he put one pea in his pea-shooter and shot it out.

"Ah, now I am flying out into the great world!" said the pea; "catch me if you can," and he was out of sight in a moment.

"The sun is the shell I intend to live

in," said the second pea. "I mean to fly straight to it," and away he flew.

The next two rolled about on the floor before they got into the pea-shooter. "We will go to sleep," said they; but the little boy picked them up and they were shot out after all.

"We will go farthest of all," they said.

Now there was only one pea left, and that was the largest pea. "What is to be will be," he said, as the little boy shot him out.

Would you like to know what became of the first pea, who said, "Catch me if you can?" He fell on the roof of a house and rolled into the gutter. A pigeon flying past saw him and ate him. That was the end of the first pea.

The two lazy peas had the same fate. They flew ever so far, but when they fell to the earth other pigeons saw them and ate them also.

The pea who wanted to live in the sun could get nowhere near it but fell into a sink. There he lay for days and weeks in the dirty water. This made him grow to a great size. "What a fine pea I am getting to be!" he said, and he swelled out with pride.

The fifth pea was the one who said, "What is to be will be." He shot quite high and hit against a garret window. Then he fell into a little crack near the window sill. This little crevice was filled with moss and soft earth which closed round him and hid him from sight. Poor pea, he felt as if he were going to die, and said to

himself: "What is to be will be". But he did not die, for the soft earth and moss kept him warm and moist.

Inside the garret, at the other side of the window, there lived a poor woman with her little daughter. The woman was the little girl's mother. She was a charwoman and earned what money she could by going out to different houses to work. Although she worked hard she did not get much money. This was very sad, because her little daughter was an invalid and needed more dainty food and medicines than her mother could afford to buy.

The little girl lay in bed, she was so weak. She had lain there for a whole year, and the mother thought she was going to die. "If she had only something to make her happy," the troubled mother would say to herself, "my child would soon grow well and strong." But the poor woman could do nothing at all. She had no money to spend on toys, and could not afford to stay at home and keep her child company. The little child was very lonely lying there with no one to play with and nothing to look at but the dark wall of the house opposite. The hours went by so slowly, and the days were long and sad while the mother was away.

One morning, just as the poor woman was kissing her daughter goodbye before she set out for work, the little girl cried, "Look, Mother! what is that little green thing there against the window pane?" The mother looked at the place where the little girl pointed, just above where the last pea had dropped. "Why!" she said; "a little pea has taken root and is growing into a tiny pea plant. I wonder how it can have got up here!" When she had gone to work the little girl lay and looked at the tiny plant as it bravely pushed out its young tender leaves. "Where can it have come from? No one planted it there, or I would have seen them. The fairies must have

brought it. And the little one was so excited that she forgot all about the pain which used to hurt her so very much. The time passed very quickly that day for the little one. When the mother came home she was surprised to find her child bright and happy. The poor woman did not think the green shoot would bring such pleasure to the little one, and she had almost forgotten all about it.

Day after day passed and the plant grew bigger and bigger. The sick child was so happy watching it as it grew in the sunshine that she soon began to feel better. "Mother," she said one morning; "push my bed close to the window so that I may see my little pea plant." Then, one sunny afternoon when her mother came back from working, she cried with glee, "Look, look! a little pea blossom is growing." All night as she lay in bed she dreamed of the pretty pink flower. Next day she felt well enough to sit in a chair for a few hours. How careful the happy mother was with the growing plant! She felt as if her child's happiness depended upon it, so she fixed a stick in the window ledge and tied a string to the stem. She did this so that the plant could wrap its climbers round and round, and reach higher and higher still.

The day came when the pink blossom had grown to its full size. The little girl, who was now nearly strong, took it in her thin hands, and, bending her head, kissed it tenderly. Her cheeks were like the pink leaves of the blossom, so quickly was she growing well. The mother patted her daughter's head, and, pointing to the little brave blossom as it danced in the warm sunlight, said: "Our Heavenly Father Himself planted that pea flower there so that it might bring happiness to you and hope to me;" and she smiled at the flower as if it had been an angel from God.

—Retold from Hans Andersen's "Pea Blossom".

Song—Adapt “I SAW YOU TOSS THE KITES ON HIGH”

—By Robert L. Stevenson, in *Songs for Little Children* (Curwen).

Into “I SAW YOU TOSS THE SEEDS ON HIGH”

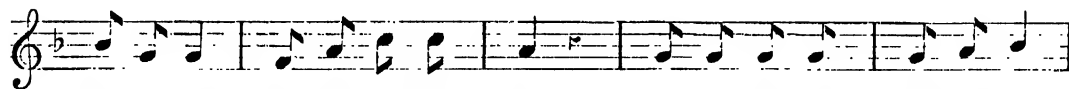
—*Songs for Little Children* (Curwen).

Game—SEED TRAVELLERS

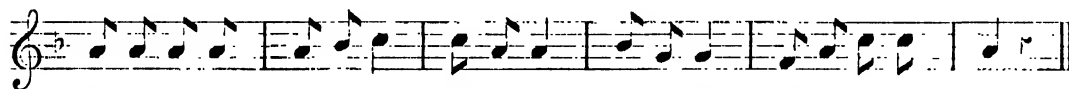
—Old Tune.



1. Ma - ple boats! Ma - ple boats! Once we grew up - on a tree Wrapped in - side



daint - y coats, Two seed ba - bies we. Soon the soft wind whis - p'ring round



Sent us float - ing to the ground. Here we play, All the day, Fair - y ma - ple boats.

2. Thistledown! thistledown!

Tiny bits of fairy fluff,
From the thistle's snowy crown,
Dainty silky stuff.
Little seeds with soft white hair,
Growing, blowing everywhere,
Soft and white,
Fairy light,
Fluffy thistledown!

3. Burdock weeds! burdock weeds!

Growing 'mong the roadside grass,
Cunning little baby seeds
Cling to those who pass.
Have no sails, so cannot float
Like the fairy maple boat;
Want a ride
Far and wide,
Clever burdock weeds.

Directions.—Arrange the children in a ring. About eight or ten should be chosen for each kind of seed mentioned.

Verse 1. Some pairs of boys face each other, and, holding arms, sit on each other's feet. They move across the ring gently in imitation of sailing boats. The ring-children can sway about with arms stretched out representing the seeds flying down.

Verse 2. Children chosen for thistledown trip lightly across the floor, while the ring-children pretend to blow them about. If possible, provide each of the ring-children with a thistle head, so that they may blow the seeds among the thistledown children.

Verse 3. The “burrs” crouch among the ring-children, who represent the wayside grass. Several foot passengers pass along the roadside; the burrs clutch their dresses and walk along with them.

Blackboard Reading and Drawing



This is a Maple Boat. It has two sails. The wind blows it along the sky and it sails to the ground.

Can you see the seed-children in the boat?

The Pine Seed has a wing too. Here is a Horse-Chestnut burr. Have you ever seen one lying on the ground? The horse-chestnut is a cunning tree. It says, "I will wrap my seeds up in a ball, and cover the ball with prickles. Then the birds will not be able to eat them."



Here are some other little burrs. They are from the Burdock plant. The burrs below are teasles.

Both these seed-cases have hooks with which they cling to any passer-by.

They grow so low that they can hook on to the wool of the sheep, or the fur of the rabbit.



Dandelion and Thistle seeds can travel by themselves. They can fly in the air like a kite.



Pea and Bean pods are clever seed-cases. They keep the seeds safe until they are ripe.



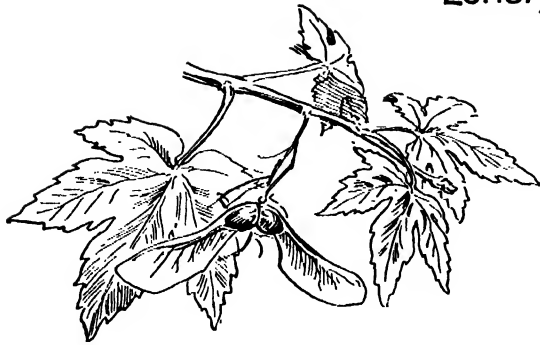
they split open. Have you ever seen a Lupine pod twist, after it had split open? That is to throw the seeds out.



Who likes Hazel nuts? So does Squirrel. He helps to scatter the seeds in nuts and acorns.



Lonely Little Seeds.



Two little brown seeds once
hung in the air,
Their playmates had all
flown away;
"O come, Autum Wind, you're
always so kind,
Take us down to our comrades, we pray."

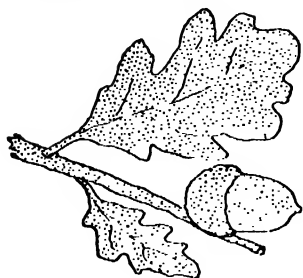
The soft Autumn Wind came whispering round;
"Ah, yes! now your brown wings have grown,
I'll carry you down to your playmates brown;-
Which way, can you tell, have they flown?"

The little brown seeds came fluttering
down;

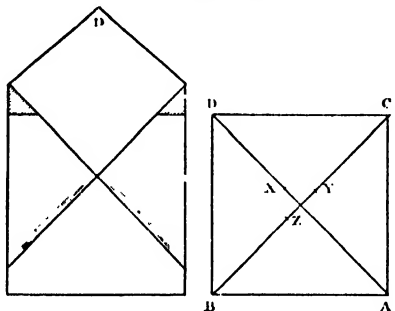
Their playmates were waiting
below;
"O come, let us play! Be jolly!"
said they,
"We'll soon have to rest
neath the snow."

-M.B.



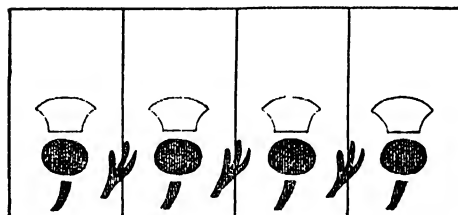
Paper Cutting—ACORN AND TWIG

Acorn, brown (or dark green); leaves, turning yellow; twig, dark brown or black. Cut each separately, then mount.

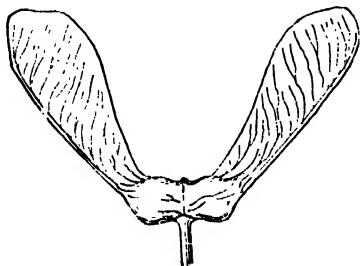
Clay Modeling—PEA POD**Paper Folding—A PENNY PACKET OF SEEDS**

Fold A, past where diagonals cross, to about X. Open. Fold B to about Y. Open. Fold C to Z. Keep folded. Take care in each fold that the diagonal creases are always folded along themselves. Close up A and B, and fasten points with gum or pin. Fold D down well over these points. Open. Cut off shaded portions with scissors. This forms flap. The children will think it great fun if they are allowed to print the name of seeds on the outside of packet.

Break clay into four pieces, one each for stalk, halves of pod, and peas. Each half of pod to be made separately.

Brush Work—THISTLE-HEAD DESIGN

Paint on dark brown or black paper. Make foundation of white. Cover calyx stalk and leaves with green. Leave plumed heads white.

Free-arm Drawing—WINGED MAPLE FRUIT

With both hands.

Brown Paper Drawing—CONES

Cones and twig, black. To make brighter, introduce touches of white in cones. 'Needles', green.

Object Lesson—PLANTS WHICH STORE FOOD

APPARATUS REQUIRED.—Set the following some weeks before the lesson: Hyacinth bulb and onion in bulb glasses in water; turnip and carrot tops growing in water in saucers; eyes of a potato growing in water; wheat or mustard seed to sprout on flannel which is kept wet; acorns growing in acorn glasses. Have also, for the lesson, carrots, turnips, onions, potatoes, peas, beans, acorns, &c. Get a buttercup rhizome (creeping underground stem).

PREPARATION.—Take pea and bean pods, acorns and nuts used in previous lesson. Remind children that they learned in summer about these seeds. Ask how they grow, and get from the children that the baby plants inside them fed on the seed leaves until they could find food for themselves. They are now going to hear about other plants which store food.

PRESENTATION.—(i) **Why Plants Store Food.**—(a) To be ready for the time when they will need much food, viz. when fresh leaves, flowers, and seeds grow.

(b) To be able to feed the young plants which grow after them.

(ii) **How Food is Stored in Plants.**—

(a) *In Roots.*—The turnip and carrot do not grow fully the first year they are set. All that summer they are busy collecting food which they will want when the flowers grow next year. The food they store swells a root out. (Show carrot or turnip.) How is this food collected? It is absorbed by the root threads. (Show these.) There must have been food in the carrot and turnip or the leaves which the children see sprouting from the tops would not have grown when there was nothing in the saucers but water. Next year, when the flowers and seeds have grown, the carrot and turnip will have shrivelled up quite small. Why?

(b) *In Stems.*—The creeping underground stem of the buttercup stores up food for the little plants which will grow from it next spring. (Show rhizome.)

The potato is a stem, although it does not look like one. All the “eyes” which can be seen outside are the beginnings of new plants. When these buds begin to grow they will want much to eat. That is why the roots have swollen the potato with food.

(c) *In Bulbs.*—The bulbs of onions, daffodils, hyacinths, &c., all contain enough food to give the next year's plant a start in life. (Cut a bulb in two, and let the children see the baby plant with the food or “cup-board” leaves round it.) Last spring, when the hyacinth plant which was growing in school had done flowering, the green leaves grew long and made food. The food went down to the scaly leaves, which grew below in the bulb. More and more food was sent down, until the bulb grew strong and thick again. Next spring, when the baby plant begins to grow, until it can get food for itself, it will feed on the food in these leaves.

(d) *In Seeds.*—The children will remember from the lesson on “How Seeds Grow” that when a very young plant begins to grow, its roots, which are not fully developed, cannot by themselves supply the plant with sufficient food. The growing plant draws on the food which the parent plant stored in the seeds. (Remove the shell from a number of acorns or pea-nuts, split in two, and show cotyledons with tiny plant inside.) The children can see for themselves that the wheat and mustard are growing on flannel with only water to drink. Where has their food come from?

(iii) **How these Stores are Useful to Us.**—(a) Many of the roots, stems, seeds, and bulbs, e.g. carrots and turnips, potatoes,

peas, and onions, are grown on purpose to provide food for man and animals. Children know how good these are when cooked and served at dinner-time. Horses and cows are very fond of carrots and turnips.

(b) Other seeds, such as certain nuts, are pleasant and good to eat. (Remind the children how fond the squirrel is of many kinds of nuts we should not care to eat, e.g. acorns.)

ASSOCIATION.—Connect, where advisable, with previous lessons on bulbs, buttercups, how seeds grow, and seed dispersal.

FORMULATION.—Plants are thrifty; they store up food whilst they can for future use, just as men and squirrels do.

APPLICATION.—Set hyacinth bulbs in glasses, and prepare a record on which to draw the different stages of growth.

Phonetics

PART I.—*Breathing with Arms Raising Sideways and Heels Raising.*

PART II.—*The “queer qu”.*

(i) Starting position: Arms to sides, &c. (See first week, Autumn.)

Teacher gives the order: “Arms sideways and heels raising—one!” Children raise arms to shoulder height. The heels are raised at the same time. The heels should be kept together, the ankle joints stretched, and the body raised as high as possible. The head and trunk of body should be in a straight line, and the proper balance of the body maintained. The breath is taken in.

At “two!” the arms return to the sides; heels sink at the same time. The heels must be lowered without the knees being bent. Breath is expelled. At “one!” the arms and heels are again raised; at “two!” lowered, and so on.

(ii) Teacher introduces the word “queer” by chatting briefly on plants which store

food. What queer savings-boxes they are! Teacher says the word slowly and distinctly, pronouncing it “koo-er”. She asks for the first sound, and, when told, shows the symbol “qu”. Children build the rest of the word. They have a minute or two given in which they can draw on their boards any thing they think queer. They print the word on their boards, and, pointing to “qu”, say the sound several times. They describe how the sound is made—lips protrude and work of tongue. Words for word-building: quack, queen, quest, quilt, quart, squat, squirt, squirrel, squeal, squirm.

Blackboard reading:—“Plants have *queer* storehouses. They fill them *quietly* all day long. What a lot of food they must *squeeze* into their savings-boxes. They do not eat it *quickly*. It lasts a long time before it is *quite* done.”

Number

Number 17.

The work below has been adapted from *Teachers' Blackboard Arithmetic* (Blackie).

(i) The names of the following numbers give an accurate description of themselves when properly put to the children:—

Thus:

(a)	(b)	
Thir-teen (13)	=	Three and ten (3 + 10)
Four-teen (14)	=	Four and ten (4 + 10)
(c)		
Fif-teen (15)	=	Five and ten (5 + 10)
Six-teen (16)	=	Six and ten (6 + 10)
Seven-teen (17)	=	Seven and ten (7 + 10)
(d)		
Eigh-teen (18)	=	Eight and ten (8 + 10)
Nine-teen (19)	=	Nine and ten (9 + 10)

(a) Teacher explains to children that "three" becomes "thir", (b) that "ten" becomes "teen", (c) that "five" becomes "fif", and (d) one "t" is dropped.

When the above table has been properly explained and thoroughly understood by the children they copy it in their exercise books. It will help to familiarize them with both the names of the numbers and their symbols. This will prove useful in later-stage arithmetic, when children read their questions either from a printed book or writing on a board.

(ii) Written arithmetic can be given this week as follows:—

$$(a) \quad 6 + 7 + 4 = \\ 6 + (4 + 3) + 4 = 10 + 3 + 4 = 17$$

Method of Working

$$\begin{array}{r} 4 \\ 7 \\ 6 \\ \hline 17 \end{array} \quad \begin{array}{r} 4 \\ \{ 3 \\ 4 \\ 6 \} 10 \\ \hline 17 \end{array}$$

$$(b) \quad 17 - 9 = 10 - 9 + 7 = 8 \\ \text{or } 17 - 9 = (10 + 7) - (2 + 7) \\ = 10 - 2 = 8$$

Method of Working

$$\begin{array}{r} 17 = 10 + 7 \\ 9 \quad 9 \\ \hline 8 = 1 + 7 \end{array} \quad \begin{array}{r} 17 = 10 + 7 \\ \text{or } 9 = 2 + 7 \\ 8 \quad 8 \end{array}$$

Story—JACK AND THE BEANSTALK

Once upon a time there lived a poor woman with her only son named Jack. She was a widow; her husband had been killed by a cruel giant, who had stolen all the treasures they had. On winter evenings she would tell her little boy about the happy times they had before the monster took her dear husband's life. As Jack listened, he would say, "If only I knew where he lived, I'd pay him back, Mother!" but his mother would shake her head and say, "No one knows that, my son."

The little money that the giant had not taken away was soon finished, and there was only one way of getting more. The poor widow had to sell all the pretty things that made her home nice. Jack would have worked for her, but he was too young. At last they got so poor that all that remained was a fine cow. "That will have to go," said Jack's mother. "Take her to the market and sell her. We cannot starve. But be sure not to take too little for her; she is a good cow, and gives plenty of milk."

Jack was pleased at the thought of going to market: it made him seem grown up.

"All right, Mother!" he said, and went off down the lane with the cow. On his way he met a man with some pretty bean flowers in his hat. "Good morning!" said the man; "what a fine cow you have there!" "Good morning!" replied Jack; "what pretty flowers you have in your hat!" "Give me your cow," said the man, "and I will give you my bean flowers." Jack was so pleased with the beans that he did not think how foolish it would be to change his cow for them.

All right!" said Jack, as he pushed the cow towards the man, and held out his hand for the flowers. The man was only too glad to get the cow so cheaply, so he took the animal and gave Jack the beans.

The silly lad ran home in high glee. "Look, Mother, what I have got for the cow!" he cried, as he held out the flowers towards her. When she saw them the poor woman wept bitterly. "Jack, Jack, Jack! how could you have been so stupid!" she said. Then she grew so angry at the thought that they had lost their cow for a few bean flowers that she threw them through the window. They fell into the garden

That night they went to bed without tea or supper. Jack was so vexed with himself that he cried himself to sleep. While he was sleeping a most wonderful thing happened. Inside one of the flowers was a tiny bean seed, which sank into the earth. No sooner had this happened than a bean plant sprang up and grew taller and taller. It grew so quickly that by the time Jack awakened in the morning it reached high above his bedroom window.

"Oh, Mother!" he cried; "do look what has grown in the night. I mean to climb up and see what is up there." He climbed for hours and hours, and at last, when he was tired out, he got to the top. Now he was in a strange land he had never seen before. There was no house in sight, and Jack, who was very, very hungry, began to walk about in the hope of finding one.

He walked on and on until he came to a house bigger than any he had ever seen. He knocked at the door. It was answered by a strange lady who had only one eye, and that was in the middle of her forehead. "Please give me food, I am so hungry; and a bed to lie on, I am so tired," said Jack. "Oh, my poor boy, go away! go away at once! A giant lives here. He eats little boys, and will eat you." But Jack begged hard to be taken in; so she gave him food. Just as Jack was eating, the giant came home. "Oh dear!" cried his wife; "what-ever shall we do? Here, jump in this cupboard, quick!" And she shut Jack inside.

The giant came in. "Wife, I can smell a little boy," he said; and Jack trembled inside the cupboard. His wife told him he could smell his dinner, and laid it on the table for him. Such a big dinner it was, Jack thought the monster was never going to have finished eating. "Bring me my money-bags," said the giant; and his wife gave them to him. As he was counting the heaps of gold, he fell asleep. "That is my

father's money," said Jack, and he stole out quietly from his hiding-place. He took as much as he could, and ran to the beanstalk as fast as his legs could carry him. When he reached home he told his mother of the exciting time he had had. They were quite happy once more, now that they had got some of their money back.

After some time the money was spent, and Jack went up the beanstalk again. When he reached the house the giant's wife told him how angry the giant had been when he awakened and discovered that the money-bags were gone. Just then the giant's footsteps were heard approaching, and Jack sprang into the cupboard once more. "Wife, I smell a little boy," roared the giant; but his wife told him it was the dinner roasting. When dinner was over the giant said, "Wife, bring me the hen that lays the golden eggs." His wife did so, and placed a basket containing the hen on the table. "Lay!" commanded the giant, and the hen laid a golden egg. "Lay again!" said the giant, and the hen obeyed once more. The giant soon grew tired and fell asleep. He snored so loudly that, although Jack crept out of his hiding-place cautiously, he need not have been afraid of making a noise, because the giant would not have heard it if he had done. "That hen was my father's," said Jack; "I will take it back to my mother." He tucked the hen under his arm and ran at top speed to the beanstalk. When he got home he cried: "Look, Mother! our hen that lays the golden eggs. Lay!" he said to the hen, and it obeyed by laying a golden egg exactly like those it had laid for the giant.

The widow and her son had now plenty of money, and Jack need not have gone up the beanstalk again; but, like many boys, he was very daring, and perhaps a little careless. So one day he climbed once more into the giant's country. As before, he went

to the big house and asked for something to eat. Just as he was eating a biscuit which the one-eyed lady had given him, the giant's footsteps were heard coming nearer and nearer. A third time Jack hid in the cupboard, and, trembling with fear, he heard the giant say, "Wife, there's a boy in the house!" The wife told him there was a good roast waiting to be eaten, and set the dinner on the table. The giant forgot all about the little boy, and began to eat. After dinner he asked for his musical box. "Play!" he said to it, and it played a most beautiful tune. By and by the giant fell asleep. Jack stepped cautiously from the cupboard, and went towards the box which made such wonderful music.

No sooner had he touched it than it cried out "Master! master!" and awoke the giant,

who seized his huge club and ran after Jack. Jack fled across the fields until he came to the beanstalk, and climbed down as quickly as he could. "Mother!" he cried, "bring me the axe." His mother ran out of the house with the axe. Then Jack, swinging it round his head, struck the beanstalk such a blow that it fell down. Crash! down came the giant too, who had just reached the top of it. He fell on the ground and was killed. "That is a just punishment," said Jack's mother.

Jack and his mother were now no longer poor. Sometimes Jack would think of the wonderful land he had climbed into, and would set beans in the garden. But it was of no use; they only grew as tall as all other beans; and Jack was never able to go to that strange country again.

Song—"THANKSGIVING SONG"

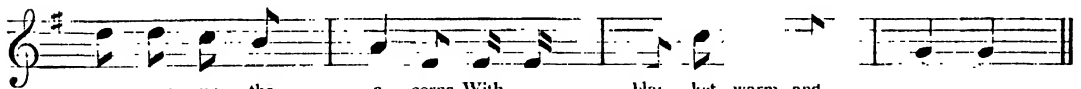
—Songs for Little Children.

Game—AUTUMN TIME

—Words Adapted.



1. The green leaves change their col - ours, And then come tum - bling down; They



co - ver up the a - corns With blai ket warm and

2. The furry squirrels huddle
Inside a hollow tree;
The tiny birds are flying
To lands across the sea.

3. The twigs in apple orchards
With fruit are bending low;
The seeds from off the tall trees
Are flying to and fro.

Directions.—Certain children chosen for trees. Round these are grouped a "squirrel", "birds", and "winged seeds".

Verse 1. The tree-children flutter their fingers. Line 3—They smooth the blanket with hands held down, palms facing the ground.

Verse 2. The squirrels scud about the wood, and then come back to the trees to huddle. Line 3—The birds fly away to a far corner of the room.

Verse 3. The tree-children let their arms droop as if weighed down with fruit. The seed-children fly to and fro among the trees.

Blackboard Reading and Drawing



Who likes carrots? Here is one. See how thick and juicy it is. It has been thrifty. Do you know what that means? Which of you saves his pennies? The carrot saves too, but not money. Money is of no use to it. It saves something which it can spend though. "Spend! a carrot spend!" Yes, it saves up food and spends it on the new leaves and flowers, which grow next spring. How does the carrot save? It gets all the food it can by means of its roots and leaves. It keeps this food in the root which swells out more and more as it gets filled.

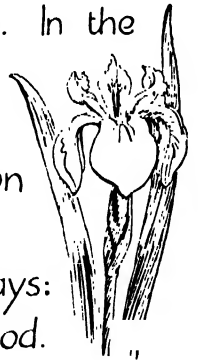
Its stem creeps
winter the
this creeping



pretty yellow flower grows in the spring it is fed on that food. Boys and girls call it a Yellow Flag.

This is another careful plant.

along under-ground. In the
food is kept in
stem. When this



The potato is thrifty too. It says:
"Next spring I shall want much food.

for my leaves and flowers." It saves the
food in an under-ground stem which has
to grow to make more room.



Do you remember the pretty tulip
that grew in our school last spring?
The careful bulb had saved up food
for it.



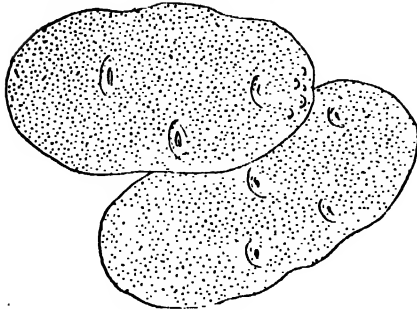


Oh the pretty brave things,
thro' the coldest days
Imprisoned in walls of brown,
They never lose heart, though
the blast shrieks loud,
And the sleet and the hail
come down;

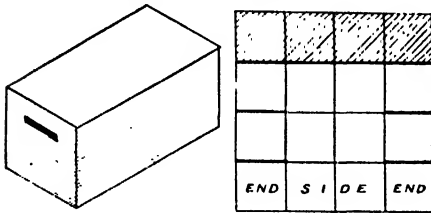
But, patiently, each weaves her
wonderful dress,
Or fashions her beautiful crown;
And then they will come, to
lighten the world,
Still shadowed by winter's frown.
And well may they cheerily
laugh "Ha! ha!"

In laughter sweet and low,
The millions of flowers under
the ground,
Yes, millions, waiting to grow.

— R. W. Emerson (Adapted)

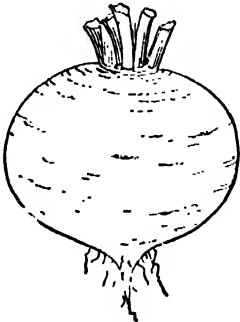
Paper Cutting—POTATOES

The shape will vary according to shape of child's own specimen.

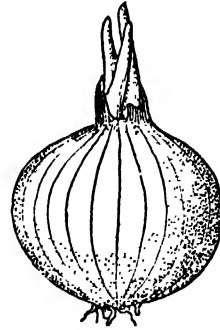
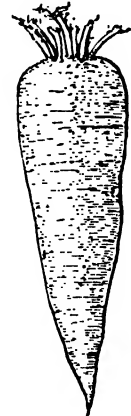
Paper Modelling—CHILDREN'S SAVINGS-BOX

For method, see modelling of sweet packet in Christmas week. If this is thought too advanced, let the children cut out two boxes, one rather smaller than the other. The larger fits over the smaller one like a lid. Fasten sides. For method of cutting, see side sketch above.

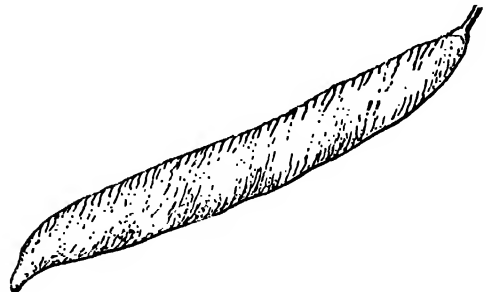
N.B.—Let the children cut the slit before they pin together the ends of boxes.

Free-arm Drawing—TURNIP

With both hands.

Clay Modelling—ONIONS OR BULBS**Brush Work—CARROT**

Carrot, bright red; rootlets, brown; leaf-stalks, green; markings, black or brown.

Brown Paper Drawing—PEA OR BEAN POD

Object Lesson—FALLING LEAVES

REQUIREMENTS.—Many autumn leaves; twigs of horse-chestnut showing scars and winter buds; other twigs; pictures of woods in autumn. Use any good coloured reproduction of the following pictures that can be obtained: "Autumn Leaves", J. E. Millais, in Manchester Art Gallery; "Waning of the Year", by Ernest Parton, in National Gallery of British Art; "Autumn in the Isle of Arran", by J. MacWhirter, R.A., in Birmingham Art Gallery; "Autumn", by Alfred East, A.R.A., Manchester Art Gallery.

PREPARATION.—If possible, take the children for a walk in the country, where they can see on all sides trees shedding their leaves. Let them gather some leaves for use in the school. If this is not possible, take the children to the nearest public park or gardens. Where even this is not practicable, prepare the children for the lesson by telling them to pick up any pretty fallen leaves they see on their way to and from school. Ask them to bring these leaves because they are going to learn something about them. Speak about the signs of autumn: Ripe fruits, corn harvests, ripening of nuts, preparation of animals for the winter, &c. Not only squirrels and snails sleep in winter, but leaves flutter down and go to sleep on the ground.

PRESENTATION.—(i) **How Leaves Work.**—(a) They make food for the tree. When the sun shines on the leaves they turn the gases in the air into food for the plant. This travels down the tiny channels which run from the edges of the leaves. (Show midribs and other veins. Let children find these on their own specimens. Compare with veins in hands.) From the leaves the food goes into the twigs and branches and then down the tree stem.

(b) They breathe for the tree. When the leaves are living, the sap is always rising to them from the root tips up the tree trunk and through the branches. Sometimes the roots absorb more moisture than the tree requires. Then the leaves breathe it out. Leaves are full of the tiniest holes, which act as mouths and let the moisture come out. (Compare with perspiration on children's hands and face.) In the morning the children can see, if they look carefully, tiny drops of water on grass, buttercup leaves, &c. These have been breathed out by the "pores". This breathing out of superfluous moisture by the leaves ensures a continual flow of sap from the roots upwards. In this way the tree is kept active and strong.

(ii) **Why Leaves Fall.**—When autumn advances, the little buds for next year appear. They grow out between the branch of the tree and the place where the leaf stalk joins it. Why? These growing buds need good food and a great deal of care. (Compare with baby at home.) It is almost as though the tree said: "I must attend to my new baby buds and make warm coverings for them. I must feed them well too. These full-grown leaves have been looked after long enough; their work is done. As I have not enough food for both old and new leaves the old ones will have to go." And so the leaves change colour and flutter down one by one. The tree cares for the buds with such attention that they would soon begin to open out if the cold weather did not check them.

(iii) **How they Fall.**—When the leaves have nearly finished their work, the tree, which wastes nothing of value to it, begins to empty them of the food which they contain. At this time the leaves change colour. (Show beautiful coloured leaves to the chil-

dren.) Then the tree makes a layer of corky material between the base of the leaf and the stem. This layer is of such a nature that the sap cannot get through; it therefore prevents the sap from rising to the leaf. Besides stopping the food supply, the tree hastens the fall of the leaf in another way. In order to separate the leaf from the twig another layer is formed just outside the cork. When the leaf falls off, it leaves behind a scar which shows where it was attached to the twig. This scar is already healed and covered with cork. (Show horse-chestnut twig; fit the leaf stalk into the scar left by the falling leaf.) What are the tiny "holes" on the scar? They are places where bundles of sap tubes ran through from the tree to the leaf. (Show other twigs and let children see that the scars made by falling leaves are just under the new buds.)

(iv) **How Fallen Leaves are Useful.**—Even when leaves have fallen from the trees their work is not finished. They help to cover up seeds and roots of plants. Not only this, but they provide food for worms and other underground animals. Worms carry the leaves to their burrows, and cover them with a liquid they make out of their own bodies. This is to get them ready for being eaten by the worms. When decaying leaves are acted on in this way they greatly enrich the soil around, and in time make new earth. Here is an instance how Mother Nature seems to waste nothing. Leaves bud and open in the spring, and work all the summer, breathing for and feeding the tree. In the autumn they fall and, decaying,

make food which the roots absorb in order to feed the new leaves. Next spring these new leaves develop and grow throughout the summer. They fall in the autumn and, like last year's leaves, help to feed the new baby leaves which follow them. And so it goes on year after year.

Why do the leaves flutter down gently? They are very, very light now that their food has been emptied out of them, and so the wind can carry them quite a long way. This is just what is wanted. When leaves are blown away from the tree they help to make the soil in other parts richer. (Compare with the question in the seed dispersal lesson: Why do winged seeds fall in zigzag lines and slowly?)

ASSOCIATION.—Associate with what the children learned about the earthworm (spring scheme) and trees (summer scheme).

FORMULATION.—Leaves fall when their work is done. In autumn the tree has not enough food for both new buds and old leaves. Fallen leaves are useful: they cover up seeds and roots; they make new soil; they feed animals and plants.

APPLICATION.—Encourage the children to bring the prettiest-tinted fallen leaves they can find. Pin them on a large sheet of brown paper with this quotation:

"Bright yellow, red, and orange,
The leaves come down in hosts;
The trees are Indian princes,
But soon they'll turn to ghosts".

Let the children repeat the words a few times, and explain that line 3 means the trees are gorgeously dressed.

Phonetics

PART I.—*Breathing with Arms Raising Upwards with Heels Raising.* **PART II.**—*The "tumble le".*

(i) The order for starting position is: are in this position the command is given:
"Arms sideways—stretch!" When children "Arms raising upwards with heels raising
(c 241)

—one!" This exercise is done as in Arms raising upwards (see Phonetics, 2nd week, Autumn), but the heels are raised at the same time as the arms go upwards.

On the command "two!" the heels sink to the ground as the arms are lowered sideways to shoulder height. Teacher takes care to see that the body is kept stiff, and the head not pushed or allowed to fall forward. At "one!" children inhale; at "two!" exhale.

(ii) Teacher introduces the word "tumble" by any novel device, e.g. she might repeat:

"The leaves go gaily whirling,
And then they tumble down;
They cover all the acorns
With a blanket warm and brown".

She asks what "tumble" means, and lets children build the word. The symbol "le" is shown before the children have time to

use "ul" or "el", which they probably would otherwise. Children draw falling leaves on their boards and print "tumble" under them. Teacher then shows the record. Words with "le" for ending are built on the word-building frame. Here are some: Apple, angle, spangle, dangle, fumble, simple, twinkle, kettle, fiddle, riddle, middle, assemble.

Blackboard reading: "The leaves dangle on the branch. 'Come, tumble off,' says the tree. 'I must look after my little buds in their cradles.' What a mumble and a rumble the wind makes! 'The leaves tremble. 'Why do you meddle with us?' they grumble. The wind says: 'It is quite simple. I come with a bustle and a rattle to help the tree.' The leaves tumble to the ground and rustle with a gentle sound."

Number

Number 18.

(i) Addition and subtraction of numbers to 18. (For method of working see last week's number.) Specimen questions:

(a) *Addition*.—"The fallen leaves were playing in a ring. There were 6 oak leaves, 8 beech leaves, and 4 birch leaves. How many leaves altogether?"

(b) *Subtraction*.—"The wind blew them. Round and round they flew till at last 7 of them flew quite away. How many left?"

(c) *Addition and Subtraction*.—"There were only 18 leaves left on an elm tree. They were lonely and wanted to fall. 7 of them and 4 more were tired holding on to the mother tree. They fluttered to the earth. How many leaves left on the tree?"

(ii) *Division and Multiplication*.—

(a) $18 \div 2 = 9 \therefore 9 \times 2 = 18 \therefore 9$ is one-half of 18.

(b) $18 \div 9 = 2 \therefore 2 \times 9 = 18 \therefore 2$ is one-ninth of 18.

(c) $18 \div 3 = 6 \therefore 6 \times 3 = 18 \therefore 6$ is one-third of 18.

(d) $18 \div 6 = 3 \therefore 3 \times 6 = 18 \therefore 3$ is one-sixth of 18.

Specimen questions:

(a) "A mountain-ash leaf has 4 leaflets on one side of its stalk, 4 on the other, and 1 at the top. How many leaflets have 2 mountain-ash leaves together?"

(b) "Sarah saw some pretty autumn leaves under the trees. She picked up 18; some were red, others gold and brown. She wanted to keep them, so pressed them in sheets of blotting-paper, 2 leaves on one sheet. How many sheets of blotting-paper?"

(c) "An old oak tree was nearly bare. There were only 18 of last summer's leaves left. 'Leave me,' said the tree, and she shook her branches. One-third of them fell down. How many was that? How many left?"

(d) "Jack Frost tapped at the door of 6 chestnut burrs. 3 little chestnuts sprang out of each one. How many chestnuts altogether?"

Story—THE BABES IN THE WOOD

Once upon a time there lived two little children, a boy and a girl. They were brother and sister, and lived in a fine old house with their father. They had no mother; she died when the little girl was born. Their father, who was very rich, was extremely kind. He seemed to want to make up to the children for the loss of their mother.

One spring day he had to set out on business for far-off lands. He was a merchant, and knew he would be away from home for many weeks. After kissing his children goodbye, and telling them to be good until he should return in the summer, he started off for foreign lands. He left his little ones in charge of their uncle, his brother, and told him to be kind to them. But, alas! although the uncle promised, he proved to be very hard and cruel. He was poor, and hated the children's father for being more fortunate than himself. He even began to think of plans by which he could have the lovely home of the merchant for his own. The poor little boy and girl grew very lonely in these days. They had no one to love and care for them; and, as the days went by, their wicked uncle grew more harsh and unkind.

The summer passed by and no news was heard of the merchant. The little children were now very sad; they began to think their father was dead. The wicked uncle thought so too, and each morning, when there was still no news, he would rub his hands together and chuckle to himself. "Another day gone by, and still no tidings!" he would say to himself. "Soon I shall claim this fine house with its lovely gardens and fruit orchards!" Then a frown

would cross his face as he remembered the children. They were in his way. He knew that no matter how much he would like to possess his brother's house and lands he could not so long as the children were alive. All summer he pondered over these things. The more he thought, the more certain he was that his brother was dead.

Autumn came round at last, and there was still no news; so the wicked uncle determined to wait no longer. He sent for two rough men. They looked savage and bold as they came up to the door, and the children, who were watching through their nursery window in the hope of some day seeing their father, looked at each other in alarm. Downstairs, the wicked uncle explained to the two ruffians that he wanted them to take the children in the woods and kill them. "No one will know about it but you and myself," he said to them; "and so that you will keep silent I will give you each a bag of gold." The ruffians consented, and the uncle called for the children. They came running downstairs, but when they saw the hard faces of the men, they drew back in fear. "Don't be afraid, little ones," said one of the men in a voice which he tried hard to make gentle; "we are going to take you to your father." At this the children jumped for joy and gladly took hold of the hands of the two men.

They walked through the woods a long way, and the little girl asked one of the men, "Have you seen my papa? Don't you think he is the best papa in the world?" And the little boy asked the other, "Have you a little boy like me? Does he love you as much as I love my father?" "Look!" cried the little girl; "see the leaves falling!

they are letters!" and, taking one up, she pretended to read from it as if it were a real letter. "Dear children," she read; "I am the mother of all the trees. I am sending these letters to tell you that you will soon see your father." The children prattled away quite merrily, and the men's hard hearts were touched to hear their innocent chatter. Both men began to feel sorry they had promised to do such a wicked thing as slay these dear little children. One of them said he would not hurt the boy and girl for anything, but the other reminded him of the bags of gold which were waiting for them. "No!" said the first; "not all the gold in the world will make me hurt even one golden hair of their heads." At this the two men began to quarrel. The two children stood by in fear, for they had heard a great deal, and learned the reason why they had been brought into the woods. The quarrel grew fiercer and hotter, and, when the tender-hearted one of the two killed his companion, the little ones trembled from head to foot.

When he saw that his friend was dead, the man called to the children to look after themselves, and rode away as quickly as he could. The children wandered about all day. Whenever they wanted to go home they thought of their wicked uncle and dared not do so. The short autumn day soon came to an end, and the poor little ones, tired and hungry, lay on the ground. They wrapped their arms round each other and soon fell asleep. The shadows were growing long and black in the wood, and all living creatures were preparing for the night. The timid rabbits came to look at the children, and scurried off to their burrows, where they went to sleep too. The squirrels hopped about in the trees above where the children lay, and chattered to each other about these two strange visitors. Then they, too, frisked away to their home in

the hole of a tree trunk, and, curling themselves up, fell asleep. The robins flew about looking for a last little titbit before they went to rest. Food was getting so scarce, it seemed to them as if the swallows had taken it all away with them. When they spied the children lying on the ground they put their little heads together and began to talk quite seriously. "Poor little friendless ones! How pale and sad they look!" said one. "See, the little girl has a tear-drop on her cheek!" said another. "How cold they will be, lying there!" a third exclaimed. "But, alas! what can robins do?" asked a fourth, and he shook his little head wisely. "Let us at least cover them and try to keep them warm," said the first robin; and, as this seemed to be the only way of helping them, the robins gathered the fallen leaves, and spread them gently over the sleeping children.

When morning came, the little ones wondered where they could be, but most of all they wondered who could have been so kind as to spread a leaf covering over them. All that day they wandered about in the wood with nothing to eat but berries and nuts, and nothing to drink but water from a tiny spring. Then, at night, when they went to sleep, the robins covered them again with a pretty coverlet of red, yellow, golden and brown leaves. On the third day the children tried to find a way out of the wood but could not do so. At night they cried themselves to sleep, and the robins, who were watching them, said pitifully, "Poor babes in the wood! we fear they will soon die of hunger and grief." Once more they covered them with leaves, and, tucking their dainty heads beneath their wings, the birdies went to sleep.

Late that night, when all the wood was dark save for a few silver streaks of moonlight, a company of men, each carrying a lantern, came searching for the children.

Some went this way and some that; others came by one path and others by another. One of the men saw the little sleepers. Bending down over them, he shone his lantern on their faces, and called their names softly and gently. The children started up with a glad cry of "Father, Father!" and were soon clasped in his arms. He called to the others that he had found his treasures; then he told his children how he had come back never more to leave them. The man who had been hired by the uncle had confessed all. The wicked uncle was put in prison at once, and the father had set out right away, late though it was, to find his

little son and daughter. The search party was now very happy, and there was much loud laughter and eager talking. This wakened the gentle robins from their sleep. At first they ruffled their feathers crossly at being disturbed; but when they learned what all the noise was about, they chirped and chattered to each other as gaily as if it were daytime. "Look at the robins!" cried the children; "it must have been they who covered us each night with leaves," and they laughed with happiness and delight. But the little robins were shy and flew away back to bed again.

—Retold from old Fairy Tale.

Other suitable stories: Whittington and his Cat; Jack and the Beanstalk; and the History of Tom Thumb.

Songs—1. "THE BRAVE OLD OAK"

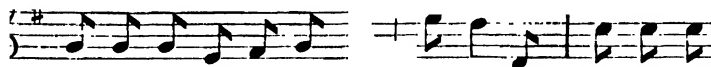
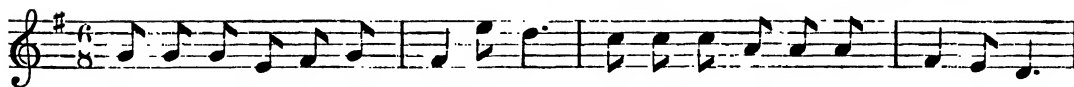
—Beecham's Portfolio.

2. "COME, LITTLE LEAVES"

—Songs for Little Children.

Game—THE LEAVES' PLAYTIME

—Words adapted from poem in *Palmerston Reader II*.



2. "Yes, autumn wind, we hear your low call;
Down we come fluttering one and all.
Over the brown fields we'll dance and fly,
Twisting and twirling, now low, now high."

3. "Dancing and fluttering the little leaves went;
I had to call them, but they were content.
Soon, fast asleep in their earthy beds,
My snow lays a coverlet over their heads."

Directions.—*Verse 1.* The "wind" flies round the ring and touches those "leaves" with whom he wants to play.

Verse 2. The chosen leaves flutter after the wind and trip and dance until—

Verse 3. A boy with bent head, representing Winter, comes slowly into the ring. He beckons to the leaves and motions to them to lie down. The leaves quietly sink down, and the old man Winter sings, "I had to call them", &c. The remaining ring-children make the falling snowflakes with their fingers.

Blackboard Reading and Drawing

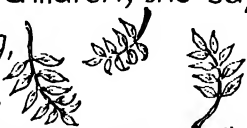
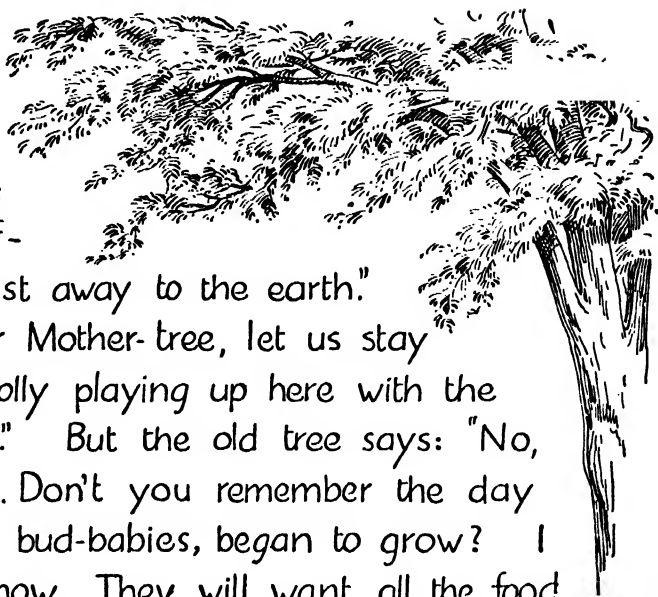
Can you hear
the tree speaking?

It says: "Summer has
gone; Winter draws near;
playtime is over, my leaf-
children. Come, you must away to the earth."

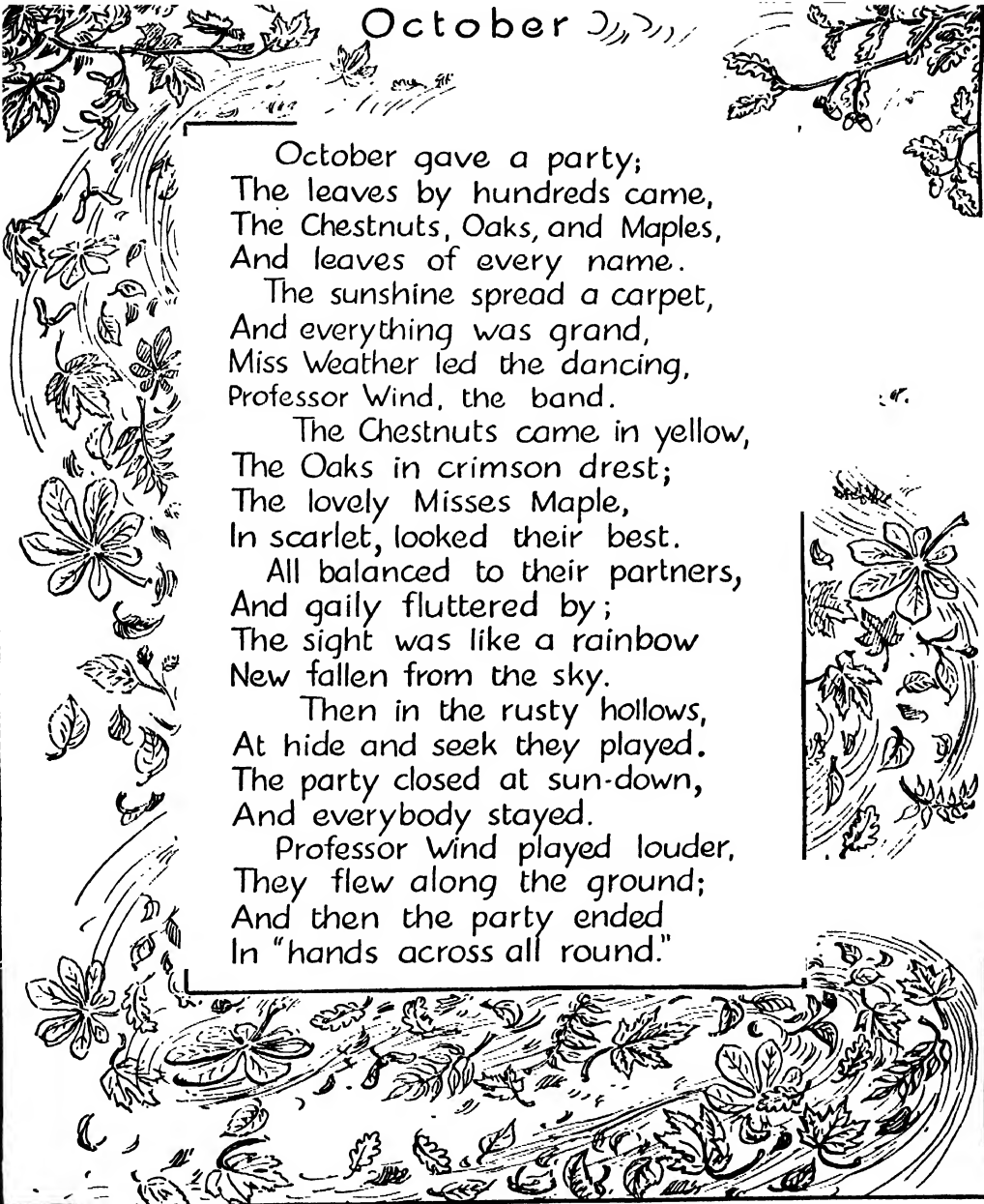
The leaves answer: "Dear Mother-tree, let us stay
longer with you. It is jolly playing up here with the
sunbeams and rain-drops." But the old tree says: "No,
No! that you cannot do. Don't you remember the day
your little brothers, my bud-babies, began to grow? I
must look after them now. They will want all the food
I can get." The leaves just shake their tips, and whisper:
"Please let us stay up here too." Then the mother-tree begins
to make a little wall between herself and each leaf: This is
to keep the sap from flowing to them. "Now you will have
to go my children," she says to them. "Oh! Oh!" they cry, "we are fall-
ing, falling, falling! Good-bye, good-bye! dear mother,
Good-bye. Good-bye! dear playmates."

The mother-tree calls to the wind, "Come, wind, blow my
leaves about." The wind comes whistling and singing. "Now for a
jolly game!" he cries, and sends them dancing and skipping.

How they flutter and fly! At night they rest on the
ground. Can you see the place on this twig
where one leaf fell away? Look at the bud it sheltered.



October



October gave a party;
The leaves by hundreds came,
The Chestnuts, Oaks, and Maples,
And leaves of every name.

The sunshine spread a carpet,
And everything was grand,
Miss Weather led the dancing,
Professor Wind, the band.

The Chestnuts came in yellow,
The Oaks in crimson drest;
The lovely Misses Maple,
In scarlet, looked their best.

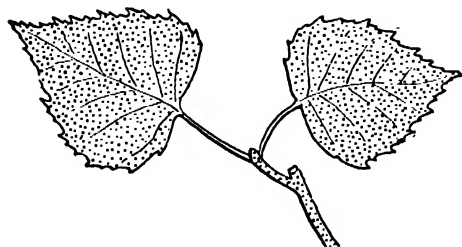
All balanced to their partners,
And gaily fluttered by;
The sight was like a rainbow
New fallen from the sky.

Then in the rusty hollows,
At hide and seek they played.
The party closed at sun-down,
And everybody stayed.

Professor Wind played louder,
They flew along the ground;
And then the party ended
In "hands across all round."

Other poems suitable for recitation:—1. "Story of a Leaf"—S. T. Butler (see Spring Scheme). 2. "Leafy Dancers"—Lady Strachey—*Recitations for Infant Schools*, by M. Riach (Blackie). 3. "How the Leaves Came Down"—*Blackie's Model Readers*, Book III.

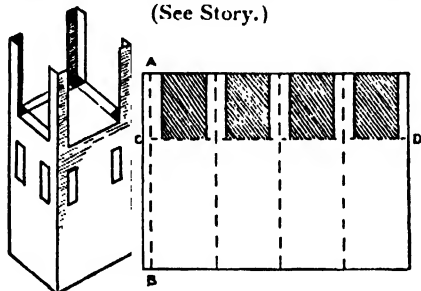
Paper Cutting—BIRCH LEAVES WITH BUDS



Leaves, yellowy green (ready to fall); twig, brown; buds, dark brown. Cut each part separately, then mount.

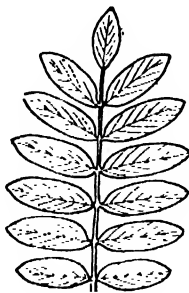
Paper Modelling—FINE CASTLE WHERE THE BABES LIVED

(See Story.)

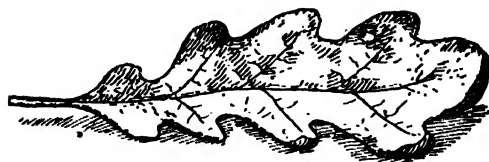


Provide each child with a sheet of paper about $10\frac{1}{4}$ in. by $7\frac{1}{2}$ in. Fold AB $\frac{1}{4}$ in. from one edge. Fold CD about $2\frac{1}{2}$ in. from long edge (about one-third of width). Unfold; fold strip into four equal parts. Paste the sides. Cut down $\frac{1}{4}$ in. from each vertical crease as far as the horizontal crease (see side sketch). Fold over shaded portions. These centre laps form top of castle. Paint windows, doors, &c.

Free-arm Drawing— CONVENTIONAL MOUNTAIN-ASH LEAF

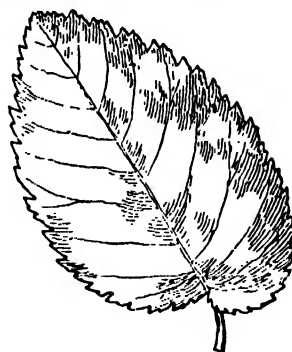


Clay Modelling—DRY OAK LEAF



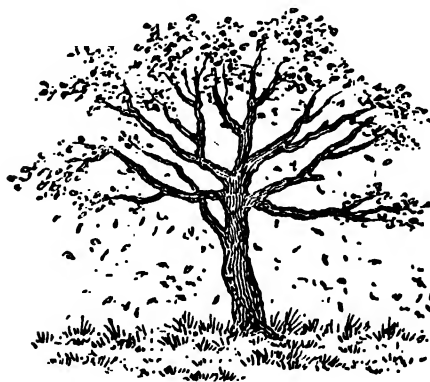
Provide each child with a fallen leaf, and let it make the twists and markings peculiar to its own specimen.

Brush Work—ELM LEAF



Mix colours to represent autumn tints in this fallen leaf.

Brown-paper Drawing—LEAF SHOWER



Grass, green; tree, brown; leaves, red, yellow, and brown tints on green.

Object Lesson—HIPS AND HAWS

N.B.—*This lesson is really a revision of matter touched upon in the autumn lessons already taken, viz.: Growth of fruit, birds in autumn, and dispersal of seeds.*

APPARATUS REQUIRED.—Apple, pear, hips and haws for each child; coloured drawings of wild rose and hawthorn blossom. A coloured copy of "Hawthorn Blossoms", by G. W. Waite, in the Worcester Art Gallery, would remind the children how beautiful the hawthorn tree was in spring. Enlarged drawings of sections of hips and haws.

PREPARATION.—Short chat about the approaching winter. What are the signs? Trees are almost leafless; the next year's buds have stopped growing because the weather is too cold; mornings and evenings are chill—there is a touch of frost in the air. Although the trees in the hedges are shedding their leaves and are looking bare, yet they are brightened here and there with red berries. (Show rose hips and haws and ask for names of the berries.)

PRESENTATION.—(i) **The Rose Hips.**—

(a) *How a Hip Grows.*—(Show a drawing of a wild rose, and let the children point to each part as it is mentioned.) When this flower grew in the summer it had beautiful pink flower leaves, yellow powder boxes, and green cup leaves underneath. These all grew round the margin of a green cup with a very narrow top. Inside this cup were small bodies waiting to grow into seeds. This they could not do till the flower dust had fallen on the top of the green cup. How do the pretty pink petals help this to take place? What else is there in the wild rose which attracts bees and insects besides its sweet colour?—The delicate perfume. What else? When the flower leaves have done their work they drop off (compare with leaves falling from the trees). The stamens wither and die, but the seeds in the green seedbox begin to grow.

(b) *What a Hip Is.*—As the seeds grow bigger inside it, it is necessary that the seedbox should grow too. (Compare with growth of snail's shell—previous lesson.) This is what happens, and the green cup or seedbox develops into a full-grown hip. A rose hip, then, is the seedbox of the rose plant. (Cut open rose hips for the children, and cut across an apple for comparison.) Where is the difference? In the hip the seedbox is rather thin, but it contains many seeds; in the apple the seedbox has grown thick and fleshy, while there are only a few (comparatively) small seeds inside.

(c) *What Rose Hips are Good for.*—(1) They protect the seeds until they are ripe. In these late autumn days, and even in winter, the bright hips can be seen in the hedges. Their glowing colour easily attracts the birds, who are quite welcome now the fruit is ripe. The birds peck at the red seed case, and dislodge the seeds inside. Thus the seedbox not only carries the seeds all summer until they are ready to be planted, but it helps to get these seeds scattered abroad. (Refer to lesson on dispersal of seeds.)

(2) Berry-eating birds eat rose hips. As winter advances seeds and grain are hard to find; insects and worms are dead or hidden away, and so birds have to rely on bright berries for food. (Refer to migration of birds in a previous lesson.)

(3) The pulp of the rose hip is used for making some kinds of medicine.

(ii) **The Haws.**—In May the wayside hedges are fragrant with the perfume of the hawthorn blossom. All the children know the hawthorn bush with its many branches, prickly spines, and its heavily scented, small white flowers. (Make a large drawing on

blackboard of a single hawthorn blossom. Compare it with that of the wild rose.) The development of the haw from the small green receptacle can be traced in the same way as that of the rose hip. The differences between the hip and the haw are: First, the former contains many seeds and the latter only one (sometimes two or three); second, the case of the hip remains soft, while that of the haw hardens and becomes stony.

ASSOCIATION.—Compare with apple (see lesson on fruit).

- | | |
|--|---|
| 1. An apple was once the small green cup of the apple blossom. | 1. Hips and haws were once the small green cups of the rose and hawthorn blossom. |
| 2. When the apple seeds began to grow, the pretty petals fell off. | 2. When the rose and hawthorn seeds began to grow, the pretty petals fell off. |
| 3. When the seeds grew, the apple seedbox grew bigger also. | 3. When the rose and hawthorn seeds grew, the seed cases had to grow too. |

- | | |
|--|--|
| 4. Birds like the juicy wall of the apple seedbox. They eat it, and leave the seeds elsewhere. | 4. Birds eat the seed box walls of rose hip and haw; they scatter the seeds in other places. |
|--|--|

FORMULATION.—

"So, though poets may sing of the blossoms of spring,
And all the bright glories of flowers may tell,
We will welcome the berries, the plums, and the cherries,
And the beautiful fruits shall be honoured as well."
—*Eliza Cook*.

APPLICATION.—Plant seeds of hips and haws. Let the children repeat the remainder of verse in last week's application of lesson:

"The scanty pears and apples
Hang russet on the bough;
It's autumn, autumn, autumn late;
"T will soon be winter now".

If desired, adapt into:

"The scarlet haws and rose hips
Are glowing on the bough.", &c.

Phonetics

PART I.—*Breathing Exercise.*

(i) The exercise combines arms raising sideways and upwards and heels raising together with breathing. Starting position: Hands to sides, feet at right angle to each other. Chest thrown well forward, shoulders at one height and drawn down and back.

On the command: "Arms sideways and upwards raising with heels raising—one! two!" the children go through the exercise described in 3rd Week Autumn Phonetics; but as the arms are raised to the vertical the heels are raised also. When the arms are lowered to the starting position, the heels sink slowly to the ground. At "one", the breath is taken in; at "two", it is expelled. Although the breathing should not be forced, yet there should be complete

respiration. It should be calm and regular, and without any holding of breath.

(ii) Introduced by any short story, e.g. Ralph, walking in the woods, sees some rose hips; if there is a boy in the class called Ralph, teacher weaves some little incident round him, bearing, if possible, on the nature lesson for the week. The boy (or teacher) prints his name, Ralph, on the board. Teacher shows symbol "ph", and tells class to make the sound. How was the sound made? Children tell that they put their upper teeth over the lower lip and "blow through". Teacher asks for another symbol which stands for that sound. Children show her "f". They build the word "Ralph", and other words containing "ph". Words such as "telegraph", "phonograph", are

only difficult in so far as they are long. The actual building up of the words is simple and within children's capabilities.

Blackboard reading: "Ralph and Philip have a bad cold. Dad telephoned for the

doctor. He came with his *physic*. It is in a *phial*. Do you know what a *phial* is? Dad will telegraph for Ma. She went to buy a *phonograph*. Ralph and Philip had their *photo* taken. They both smiled."

Number

General exercises on 18, including "1½ dozen", "18d. = 1s. 6d.", "18 months = 1½ years".

"Ethel went gathering autumn leaves. She picked 4 crimson oak leaves, 7 yellow chestnut leaves, and 7 scarlet sycamore leaves. How many altogether?" Children write $4 + 7 + 7$, and work.

"Frisky squirrel hid a dozen nuts in a hole in the old elm tree. How many was that? One day he found 5 hazel nuts and added them to his store. How many more must he find to have a dozen and a half?" Children write $18 - 12 + 5$, and work.

"In the cornfield were 18 sheaves of corn. The cart was standing by the gate waiting to carry them away. The farmer carried one sheaf at a time to the cart. How often had he to go into the field? If he could have carried 2 at a time—how often then?"

"3 feet make 1 yard. A squirrel sprang 6 yards in a few leaps. How many feet was that?"

"Grace has gone to stay with her aunt. Her aunt wishes her to stay 1 year and a half. How many months? Grace has already stayed half that time. How long has she been with her aunt?"

"Doris's mother bought her 6 yards of hair ribbon. 1 yard will make 3 ribbons. How many hair ribbons will Doris have? How much are they all worth at 1d. per hair ribbon?"

"Eleanor went hunting with her brother Charlie for rose hips. She wanted 18 to thread on a string for a necklace. She only found 7 hips and Charlie got 5. How many had they still to find?"

"4 weeks in 1 month. How many weeks in 4½ months?"

"How much will 18 eggs cost at 1s. per dozen?"

"12 inches make 1 foot. How many inches in 1½ foot?"

"Charlie is 12 years old. How old will he be in 6 years?"

Story—THE COURAGE COUNTRY

Jack, the miller's lad, was in a very bad way indeed. So, in fact, was the miller, and everyone else at the mill. What the reason was I cannot tell you. The day was a dull one, perhaps that was why everyone was cross. The miller thought some work was done which was not done at all. That was the first thing that upset him. So he scolded. I don't think he quite knew how hard he scolded, but Jack did; and when the

scolding was finished, he threw down the slate which he held in his hands, and seized his cap, and rushed away to find the green field which lay high on the slope above the mill.

Jack had not wept when the miller scolded him, but now that he was alone he threw himself upon the green grass, and cried with all his heart. Poor Jack! he had to work at the mill and also at his lessons, for he was

to be a miller like his uncle; and to-day neither the mill nor his lessons had gone well.

He was still weeping, but more quietly, when from his hole, not far distant, Mr. Rabbit poked out his head to find out what the queer noise was about. The little creature listened for a few moments, then he drew his head in again, and scuttled away. Now Jack was almost quiet, when he started, and held his breath to hear a tiny squeaking voice, which seemed to come from the earth just beneath his head.

"Well," it said, "have you found out the meaning of that horrid, dreadful noise?" And another squeaky, thin little voice replied: "It is only Jack, the miller's lad, who is weeping because his work is difficult."

When Jack heard this remark, he stopped weeping altogether, and drew his hands across his eyes that he might press close to the grass, and hear more of what these odd little voices said. Then he saw that across the grass ran a crack in the earth about as wide as his finger, so he put his eyes close to it and peered through. At first he could make out nothing at all, but after a while he could see Mr. Rabbit and his wife, and a little later he made out the quaintest, oddest, little brown man in the world, who sat in a corner of the wide hole beneath the crack, with his legs crossed, and his head on one side.

"All work is difficult," said he in a husky little voice that almost set Jack laughing; "but in Courage Country everybody does not cry over it. Just tell me what is the use of crying—unless you are a goose, like Jack, the miller's lad, and cannot do anything else?" At this Jack started up indignantly; "I am not a goose!" cried he. No one answered, and when Jack looked through his peephole again, he saw that Mr. Rabbit, and his wife, and the little man

had moved from their seats, and were listening with all their might.

"It was nothing but the wind," said the little brown man at last. "It was nothing but the wind," repeated Mr. and Mrs. Rabbit; and Jack again wanted to laugh, seeing the wise air they put on, trembling all the time. But the little brown man was talking again.

"Look at me," he said. "If any work is difficult, surely mine is; but I just go on my way and do my best. I am the Little Brown Schoolmaster of the Fields and Hedges. Who teaches the farmers' seeds to grow?—I do. My task is to see that he gets his harvest, and a very hard task it is. Who teaches the hedges to grow?—I do. My work is to see that the hips and haws grow on the bushes; and very hard that is too. But I work on and do my best."

"I suppose the seeds are very hard to teach?" said Mrs. Rabbit timidly. "Not a bit of it; they are the best children in the world, and try their hardest," said the Field and Hedge Schoolmaster proudly. "They are not easily discouraged, like Jack, the miller's lad. But, think of it, when I have taught them how to meet the Rain and thrive on it, out comes that imp the Sunlight, and scorches with all his might. This is how to behave in the Sunlight, say I; and—down comes the Rain. Then, when they are making good use of the Rain, down falls the snow."

"That is very hard," said Mr. Rabbit gently.

"It is," said the Little Schoolmaster; "but then it keeps me busy, and we all struggle on for the farmer's sake."

"I, too, have my difficulties," said Mr. Rabbit, after a pause. "There is Tan, the miller's dog, who is always a terror to me. Many a time when I have been out on a journey he has set himself to wait for me to do me harm. There are times when I

am afraid to put my nose outside my door; but there, when I must go out, I go out—for that is the only thing to do—to go on one's way and hope for the best." "What he says is quite true," said Mrs. Rabbit, and she nodded her head. Then they all three turned, for a tiny faint little voice began to speak, it seemed from the far distance. Jack had to strain his ears to hear.

"Even to go on one's way is not always so easy," it said. "Listen to me. I am the tiniest plant in the miller's hedge. When I was a seed a robin dropped me out of a haw, and I fell down, down in the earth.

Then I thought I should not be able to grow at all for someone kicked a big stone over me. When I started to grow, and hit my head against it, I thought: 'This is enough to stop anyone's growing; I need not try any more.' But after I *had* tried and tried, and stretched and struggled, I wound my way round the stone's edge, and now my red haws uplift themselves to the sun."

"That is the only way—to keep on trying," said the Field Schoolmaster.

But Jack, the miller's lad, did not hear that remark; for he had gone off to the mill to try again.

—From *Blackie's Model Readers*, with slight adaptation.

Songs—1. "GLAD OCTOBER"

—*Normal Instructor*, for October, 1902 (monthly journal published by F. A. Owen Publishing Company, Dansville, New York).

2. "BRIGHT OCTOBER"

—*Primary Plans*, for October, 1908, published by same firm.

Game—RED-BREAST AND RED-CHEEKS

—Old Tune.



2. "Dear rose trees, I'm hungry;
My dinner I seek.
Can't you spare me one red hip
With a bright scarlet cheek?"



"Little brown bird so lonely
Shall have what he needs.
He'll eat the cheek only,
And scatter the seeds."

Directions.—*Verse 1.* The lonely bird flies round about and in and out of the ring (hedge). The hedge-children each hold a rose hip (specimen used for nature lesson will do).


Verse 2. The bird-child replies, and looks round the ring for his favourite.

Verse 3. While ring-children sing this the bird-child shows his choice by picking the hip held by that child. They change places, and the new bird-child flies round the ring. The whole is repeated.



Blackboard Reading and Drawing


 Listen to what the scarlet Hip says. "Do you like my rosy cheek? I grow when the days are dull. Shall I tell you how I came? A lovely wild rose grew in a hedge. One day a honey bee visited her and left her some of his golden pollen. After that her pretty pink petals fell. 'Now I am dying' she said. But just then something stir in the little seed-cradle which grew below the pretty petals. Her little seed-babies were beginning to grow. They grew bigger and bigger. The seed-cradle grew bigger also.  I am that seed-cradle Would you like to see the baby-seeds inside?"

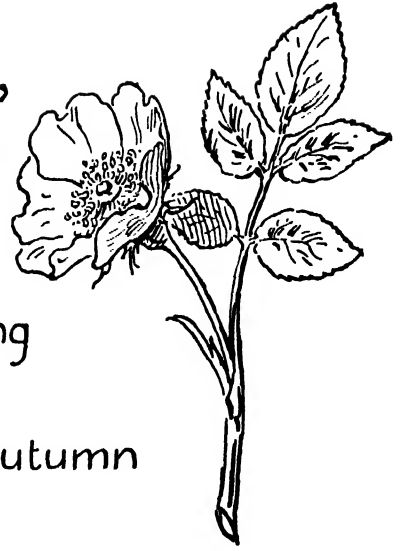
Hear what the Rose-Bush says: "Please, Autumn Sun, shine on my seed-cradles and make them bright red."

 Then, Robin will see them, and peck at them.

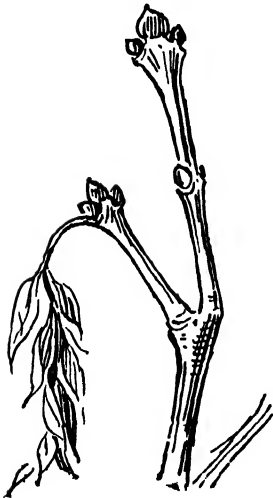
Here he comes. He has eaten a hole in the side of one. See, the seeds are falling out." Rose Bush is glad. "Thank-you, Robin", she says: "Now my baby seeds may grow into rose-bushes like me."


 In summer a boy sang, "Where the hawthorn blooms the sweetest, That's the way for Billie and me". In winter time the  Blackbird sings, "Where the red haws shine the brightest. That's the way for Starling and me".

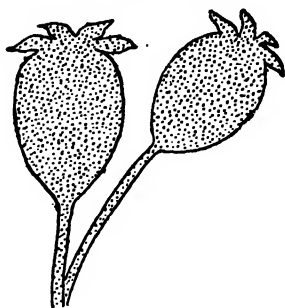
Summer is gone
with all its roses,
Its perfumes and
sweet flowers,
Its warm air
and refreshing
showers:
And even Autumn
closes.



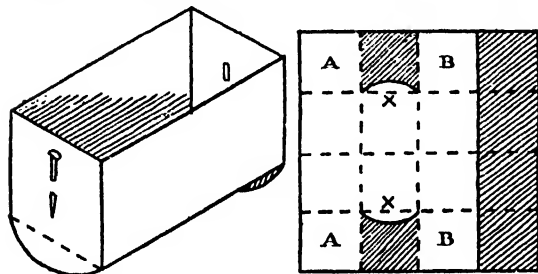
Yes, Autumn's chilly self
is going,
And Winter comes which
is yet colder;
Each day the hoar frost
waxes bolder;
And the last buds cease blowing.



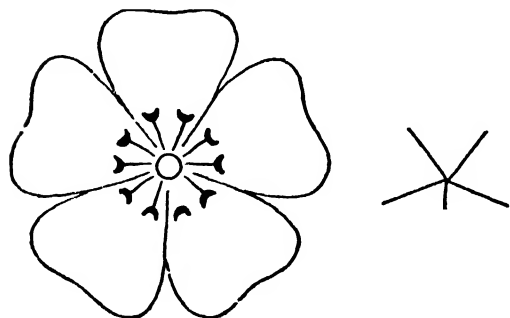
— Christina Rossetti.

Paper Cutting—ROSE HIPS

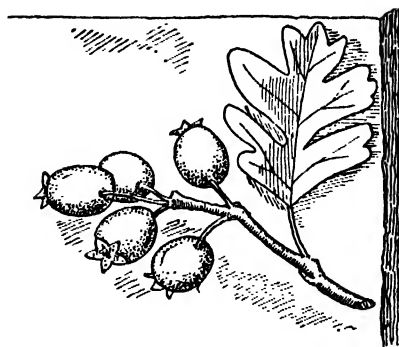
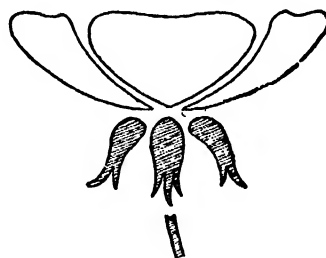
Hips, scarlet; stems, green; withering calyx leaves, black.

Paper Modelling—ANOTHER CRADLE

Introduce by likening the rose hip to a cradle in which the seed-babies are rocked when the wind blows. Shaded portions are waste, to be cut away. Parts *x* are folded back for the rockers. Pin A over B for sides of cradle.

Free-arm Drawing—CONVENTIONAL WILD ROSE

Let the children draw fine lines radiating from the centre (see fig. B) as a guide.

Clay Modelling—HAWS**Brush Work—CONVENTIONAL WILD ROSE**

Petals, pink; remainder, sap green.

Brown-paper Drawing—SECTION OF ROSE HIP

Fruit case, red; seeds, creamish yellow.

N.B.—If this is too difficult an exercise, take a rose hip.

WINTER PERIOD



"Lastly came Winter clothed all in trize,
Chattering his teeth for cold that did him chill;—
Whilst on his hoary beard his breath did freeze;
And the dull drops that from his purpled bill
As from a libeck did adown distill;
In his right hand a tipped staff he held,
With which his feeble steps he stayed still;
For he was tint with cold, and weak with eld,
That scarce his looséd limbs he able was to weld."

—Spenser.

Central Idea: "A SLEEPING TIME"

WINTER SLEEPERS

ing Trees

CHILDREN'S WINTER FRIENDS { Ice and Snow.
The Robin.
Evergreens.

"PEACE ON EARTH, GOODWILL
TO MEN" } Christmas.

{ Linen and Cotton (Tablecloth).

THE HOME

Coal { The Mine.
Its Properties and Uses.

{ Pets { The Rabbit.
The Pigeon

WINTER PERIOD

Object Lesson—SLEEPING TREES

APPARATUS REQUIRED.—Pictures of trees in winter; suitable variety of twigs with winter buds; blackboard drawings of sections of twig and bud.

PREPARATION.—Summer has gone with all its fullness of life, and even autumn is past, with its busy times of preparation for the winter. Winter has come, bringing with it cold and driving rain, with prospect of frost and hail. Nature seems to be dead. Fields are brown and bare; the hedges are straggling, and, but for a few berries, are bare also. But the trees and grass and flowers are not dead. They are only resting. They are all alive; but they have worked hard all spring, summer, and autumn, pushing forward buds and blossoms, spreading green leaves, and feeding their fruits. So, like a tired workman, they are now enjoying a well-earned rest.

PRESENTATION.—(i) **Why Trees Rest.**—Because they cannot work in the cold weather. Winter is the trees' night-time. In autumn the next year's buds began to grow, and in the warmer days it seemed as if they would open out. But the coldness of the chilly days and frosty nights came, and, touching those parts of the tree which are aboveground, stopped their growth. The full-grown leaves have fallen, so now there is nothing to make a call for food except the tiny buds. As these, however,

have ceased growing, the tree needs very little food from the soil. Now is the resting time, and the tree makes the very best of it by letting every part go to sleep.

(ii) **How Trees Rest.**—(a) *Buds.*—The trees which look so bare in winter are nevertheless covered with tiny buds, which sleep all through the cold months. (Show several twigs with their winter buds.) Like children asleep, they need some protective covering. (Compare with blankets in baby's cot at home.) Leaf-buds are protected and cared for by the tree in many ways. Some are covered with hard scales which keep out the rain (show mountain-ash twigs); others have coats which are covered with soft hairs; and others again have a waterproof covering of brown sticky leaves or scales. (Show horse-chestnut slips. Let the children pull the buds to pieces.) Not only is the outside protected, but the inside is sometimes provided with a soft downy substance, as if to care still further for the baby leaf which is wrapped inside. (Make large drawing of section, and, if one has been kept, show record picture of horse-chestnut bud opening, with the downy matter sticking to the young leaves and stalks.)

(b) *The Stem.*—This is the passage for the sap as it rises from the roots to the tips of the branches, then downwards again. (Show a stem cut in two.) Like the buds,

the stem needs to rest. It also must have a coat of something which will keep it safe during the winter. The bark overcoat of cork had little tiny dots and streaks in it during the summer. Through these little "mouths" the tree let out all the gases and moisture it did not need. The frost and cold of winter would enter these "mouths" if they were left open, and so the tree closes them so tightly that neither air nor water can get in the stem. (Show cork, and question as to its uses.)

(c) *The Roots*.—Many trees, such as the oak and the ash, have roots which stretch deep down in the earth. These roots reach so far as to be practically out of the reach of frost. They feel no winter as far as temperature goes, and could keep on growing and creeping and absorbing moisture from the soil if the tree required it. But as soon as the cold makes the tree aboveground inactive these roots have no call to gather the fluids from the soil. Their working time is over, and they also rest with the remainder of the "family".

ASSOCIATION.—Associate with what was

learned in lesson on "Trees" in the Summer Scheme.

- | | |
|---|---|
| 1. In summer the leaves breathe for the tree and help to make food. | 1. In winter there are no leaves; they fell in the autumn. |
| 2. In summer the next year's buds had not begun to grow. | 2. In winter they are already born, and are asleep in their cosy cradles. |
| 3. In summer the stems had tiny open mouths through which the tree breathed. Air and moisture could get through them. | 3. In winter the mouths are shut tightly. The "overcoat" is waterproof and air-tight. |
| 4. In summer the roots are busy creeping between the grains of soil, absorbing food for the tree. | 4. In winter the roots are "out of work", and so they rest too. |

FORMULATION.—

"The leaves are swept from the branches,
But the living buds are there,
With folded flower and foliage,
To sprout in a kindlier air." — Bryant.

APPLICATION.—Place winter twigs in medicine bottles filled with water, with labels round the necks denoting kind of twig. Prepare a record of development of buds. For further application see Occupations.

Phonetics

PART I.—*Breath and Tone Control Exercises*. PART II.—*Silent "k" in "knot"*.

(i) Teacher gives the command: "Arms raising sideways with breathing—one! two!" (For details of exercise, see drill in 1st Week, Autumn Period.)

Children make the sound of the huge saw in the sawmill, "Dzh! dzh!" They move their arms, with elbows bent, forward and down in imitation of the circular saw. Breath is taken in between each "dzh!"

(ii) "Do you know what this is?" Teacher holds up a piece of planed wood with a knot in it. "If father is hammering nails in wood, he takes care not to put one in a knot. Why? What is a knot in wood?" Teacher

tells that it is probably the place where a branch of the tree joined the stem. "What other kinds of knots are there?" Before children print the word on their boards, teacher tells them there is a silent letter, which stands like a sentinel at the beginning of certain words—knot is one of them. Before the symbol is shown, children suggest a colour for the silent letter. They will probably remember the colour they used for the final "e" (see 1st Week, Summer, Phonetics), and suggest yellow or brown, like the quietly falling leaves about which the children heard a fortnight ago. Teacher produces tablet

with the symbol "k" printed in yellow. She tells the children to build the words below. They must print the silent "k" at the beginning of each one: knock, know, knit, knife, knee, knelt. *N.B.*—When children have any difficulty with words such as "know", teacher helps them by saying: "Use the 'blow ow'".

Blackboard reading: "Jim was lost in

the dark. A branch knocked his knife out of his hand. 'I know it is here,' he said as he knelt to find it. He got it, but his knees were muddy. 'I will knock at this door with my knuckles, and ask if those inside know the way.' A woman was kneading. Her girl was knitting. The father knew the way. He lifted his stick by the knob and pointed."

Number

Number 19.

(i) The working and setting down of a simple division sum with remainder, e.g. $19 \div 3$.

"Three joiners came to the owner of a forest to buy trees. He had only 19 to spare. The men were to have an equal share each. How many trees did each get?"

Working:—Each child has 19 sticks. Teacher calls them trees, and tells the children to divide them equally in 3 lots. Teacher says nothing about a remainder. The children find that when they have divided their "trees" there is a "tree" left. To give it to any of the men would be to make that man's share too great. What must be done with it? Divide it between the men. What portion of a tree will each get? One-third. How many trees does each joiner get? $6\frac{2}{3}$.

N.B.—If teacher thinks the resolving of remainder into a fraction of the divisor too advanced she may leave it simply +1.

Setting down:— 3) 19 trees

$6\frac{2}{3}$ trees (or 6 + 1).

(ii) Addition and subtraction, multiplication and division of numbers to 19. Specimen questions:—

"A fir tree was cut down. The joiner made 5 deal tables out of it. How many tables could he get from 3 such trees?"

"There was a small forest. In it were 3 oak trees, 8 fir trees, 4 copper beeches, 3 mountain-ash trees, and 1 silver birch. How many trees in the forest? How many left if the fir trees were cut down to make school desks?"

"A storm swept over a plantation in which grew 19 pine trees. The lightning struck 5 of the trees and they fell to the ground. How many trees left standing? The branches were lopped off the 5 trees, and they were carried away. If one log took 3 men to drag it, how many men would be needed to drag 5 such logs fastened together!"

Story—LOST IN THE WOODS

Australia is a country far away across the sea. It is so far off that steamers take six weeks to go there. The boys and girls of Australia are our cousins, and they like to hear of the "Old Country", where their fathers and mothers were born. When you

are fast asleep at night they are at school—and wideawake, let us hope! When you are keeping Christmas they are keeping it too; but with them it is the middle of summer.

When their summer is over, the leaves of

the trees do not fall off as they do with us. But instead, some of the trees cast their outer bark! One of these is the gum tree, which rises like a tall chimney-stalk, and has a crown of leaves at the top. These high trees do not give much shade from the sun.

Some parts of Australia are quite dried up with the heat of the sun. In other places, where there is too little rain, the farmers bore deep down into the ground, and the water rushes up through pipes. In this way they get plenty of water for their flocks. Great flocks of sheep are kept there for the wool, which is sent to our land to be made into cloth for us to wear. The sheep-farmers send us mutton too; but first they freeze it hard, so as to keep it fresh and good. Besides sheep, there are fine herds of cows, horses, and pigs.

But there are beasts and birds in Australia that seem strange to us. There is the kangaroo, that jumps along on its hind legs, and carries its babies in a pocket in front. And there is the emu, a strange bird that stands higher than a man, but cannot fly.

The wild land where these birds and beasts lived is fast being changed into fruit gardens and wheat fields. But those who went there first had hard work to clear the land. Here is a true story, that reminds us of the *Babes in the Wood*.

In a lonely hut in the woods there lived a joiner named Duff. Every day he used to send his three little children out into the woods to get broom for the fire; but one evening at tea-time they did not come back. They had gone too far from the hut, and had lost their way. The gum trees, with their tall bare stems, looked so much alike that the children did not know which way

to turn. There were no berries to eat in these woods. There was gold in the beds of the dry streams; but what use was that when there was no water to drink?

When they did not come back to tea, Duff went into the woods to look for them. "Coo-ee! Coo-ee!" Duff's call rang out through the woods. But there was no answer; only the mad laugh of that strange bird, the "laughing jackass". All night long Duff hunted, and next day, with some friends, he hunted still. But they could find no trace of the children.

At last, after a week of seeking, Duff got some black men to help him. These black men lived in the land before the white men came. They are very clever at finding a track in the forest. Their quick eyes can pick out a broken twig or a pressed leaf, that shows where feet have stepped. Soon one of them stopped, and pointed to a mark in the grass. "Here little one tired," he said; "big one carry him along."

So the men went on till at last they found the three children lying under a bush. Were they dead? Not quite. Frank, who was just five, seemed stronger than the other two. And no wonder! for his brave sister Jane had given him her cloak to keep him warm, and Willie had carried him over the hard ground. They found very little water, only a little now and then in the cup of a pitcher plant. But little Frank always got the biggest share of it.

Duff and his party carried the children back to the hut, and in a few weeks they were quite well again. Then one day they had a surprise; for some of Duff's friends brought a bag of money as a present for Willie and Jane.

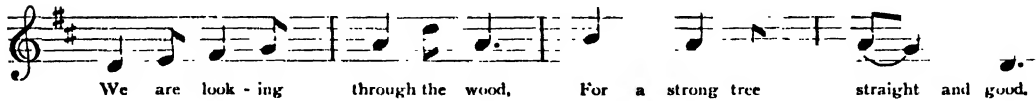
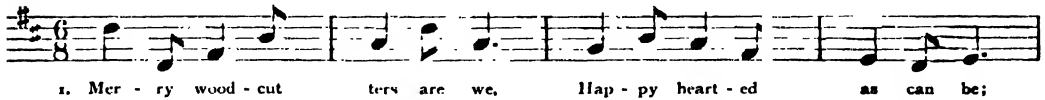
—*Little Folk in Many Lands*—Hugh Laurence (Blackie & Sons)

Other suitable story: "Mercury and the Woodcutter".

Song—"THE TREE IN WINTER"

—Songs for Little Children.

Game—THE MERRY WOODCUTTERS



2. Get a rope and bind it well—
What would happen if it fell?
Bring the saw and hold it tight,
Pull and push with all our might.

3. Take care! soon the tree will fall;
Down will come the monster tall,
Crack! 't is coming! hear the sound
As it crashes to the ground.

4. Lop the branches every one;
Then, when every twig is gone,
Bring Old Dobbin up the hill;
He will drag it to the mill.

Directions.—*Verse 1.* A few children walk through the wood (a circle of children) shouldering imaginary axes and carrying a saw (a pointer will serve). Their leader selects a tree and stands before it.

Verse 2. The woodcutters pretend to bind the tree, and then use the saw. They hold the saw (a pointer) at each end horizontally.

Verse 3. The woodmen prepare to stand back, and at line 3 they spring aside quickly.

Verse 4. While the branches are being lopped, one boy goes for the horse—Dobbin (can be represented by another boy). The children tie the log to the horse, and follow it as it is dragged through the wood.

N.B.—The tree should be imaginary. Do not choose a child to represent it, or there will be a tendency towards rough play.

Blackboard Reading and Drawing



What is that old Tree saying to the grass at its feet? Listen! It says: "You think because I haven't a single leaf to wear, that I am dead. Don't you know I am all alive, from the hairs on my roots to the tiny buds on the end of my top-most bough?"

"Yes! I have some baby buds.

I know you didn't think so. Why! last Autumn I knew they were coming, so I got their little brown overcoats ready. And, lest Jack Frost should unfasten them with his nimble fingers, I made a sticky gum to hold them on.

"Ah, yes! Winter has only just begun, I know, and Spring is a long way off yet; but I have my beautiful pink and white blossoms hidden away ready to wear. No! I'm quite alive; but I pity the poor flowers at my feet."

"What! pity us! You need not. We're ever so busy, down here,



getting our pretty spring frocks

ready. Mrs. Snowdrop is filling her pantry with food for next year's Snowdrop baby.

Oh, no! don't pity us; we do not need it."



The Secret

The trees were all a-whispering,
October day,

I stopped to catch the whisper too,
And heard low voices say:

"Dear trees, 'tis time to say goodbye;
We're growing old and gray."

"I've such a thing to tell you,"
The Maple softly sighed.

"That Wind, if he should hear it,
Would spread it far and wide;

And we must keep the secret well
Till Spring shall give us leave to tell.

"Last night, my leaves were falling
As thick as any rain;

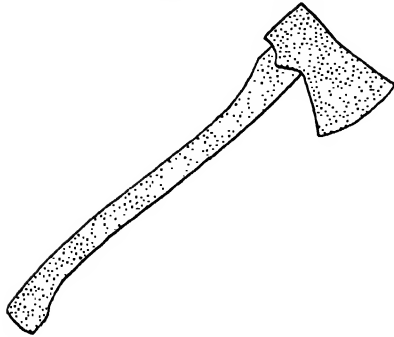
I felt a gentle stirring
Beneath my bark again,

And hark! 'tis true - I tell you so -
My next year's buds began to grow."

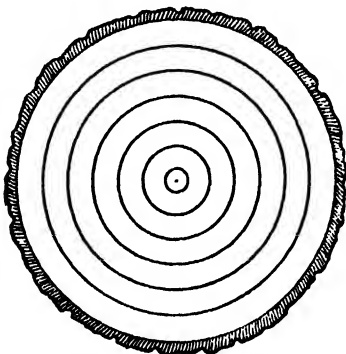
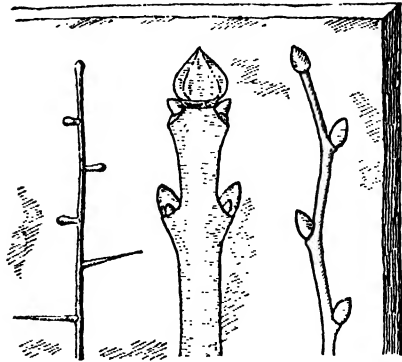
Then softly, softly, falling,
Like ashes gray and old,

With here and there a scarlet flare,
And here a glint of gold,

The dead leaves drifted round me,
And I knew the tale they told.

Paper Cutting—AXE OR SAW**Paper Folding—AXE**

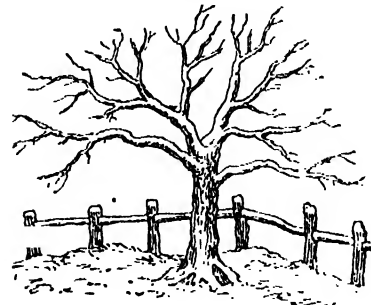
Fold from half a square of paper, and proceed as if for hoe (see lesson on Snail, Autumn Scheme). Divide the shaded portion in fig. 2 by folding back half of it to each side.

Free-arm Drawing—CONVENTIONAL SECTION OF LOG**Clay Modelling—WINTER TWIG (FROM NATURE)**

Provide twigs of different kinds. Encourage the children to copy special markings.

Brush Work—TREES IN WINTER

Paint on dark paper. Trunks of trees, brown; branches, dark green; ground, white. Touch branches with white for snow effect.

**Brown-paper Drawing—A SLEEPING TREE**

Tree, brown; rails, red; ground, brown touched with white. Make a few faint white lines on branches to imitate frost; upper edges of rails to be tipped with white.

Object Lesson—ICE AND SNOW

APPARATUS REQUIRED.—Pieces of ice; drawings of snow crystals; pictures of snowstorms, icebergs, &c. Reproduction of "A Joyless Winter Day", by Joseph Farquharson, in the Tate Gallery.

PREPARATION.—This lesson should only be taken during a frosty week, or on days when snow is falling. A short chat about the keen biting air which made the children run to school, and checked all desire to loiter, will be sufficient preparation for the lesson. The teacher should take the children to the playground, and let them talk freely about the winter, "who snows his soft, white sleep and silence over all".

PRESENTATION.—(i) **Snow.**—(a) *What Snow is.*—Last spring the children learned that millions of exceedingly small drops of water, called water vapour, were continually rising from the moist ground or from stretches of water. That, they learned, is how rainclouds are formed. There is always some of this water vapour in the air. The children breathe it out of their bodies. On a cold day like to-day they can see it coming from their mouths like little clouds. Sometimes the cold is so very severe that some of this water vapour gets frozen into little crystals. (Make drawing of crystals and ask children to notice their glitter in the snow outside.) At night the water vapour breathed out by the children travels to the window pane. Here it is frozen and makes all kinds of lovely pictures of clouds, and hills, and forests. These crystals are too small to be seen easily, but if we could see them clearly we would be charmed with their beautiful glistening shapes.

The thin powdery white on the railings and walls, which children often mistake for snow, is just a collection of these pretty crystals. When several crystals freeze together in the sky, then we have a thick snowflake.

(b) *Why the Snow falls from the Sky.*—(Let the children contrast the heavy appearance of the sky to-day with that of a previous fine day.) Why is the sky heavy looking? Thick clouds are floating about; they are full of the water vapour which has been rising, and are ready to break. But it is quite as cold up there in the clouds as it is here in the yard, where the frost has put a hard sheet of ice on all the water puddles. The vapour gets frozen and turned into crystals. These get together and form snowflakes. The snowflakes are too heavy to stay up there, and so have to flutter down. How does the snow fall? Yet it does its work carefully and well. Here is a lesson for us.

(c) *Uses of Snow.*—Snow not only makes the world look lovely and provides fun for boys and girls, but it keeps the ground warm. Although it feels so cold itself, yet the thick snow blanket covers the earth and prevents the frost from getting through and killing the plants hidden there. Snow, unlike water, cannot flow away. How does it go away? When it melts it sinks down to the sleeping roots of the plants it has been hiding from the frost. It does not matter to the earth now if the snow covering vanishes, because, with the warmer air which melted the snow, the frost was driven away. The plants are safe once more.

(ii) **Ice.**—(a) *What Ice is.*—What has happened to the puddles of water which were in the roads yesterday? The weather was so cold that it has frozen the puddles into hard solid pieces of ice. Even the water dropping from the roofs and rails has been frozen into icicles. (Show actual icicles or make drawing.) Ice, then, is frozen water. Tell the children simply about the rivers of ice which flow in winter down mountain sides into the sea, where great pieces of ice

float about. (Show picture of icebergs, and let children see how dangerous they are to sailors.)

(b) *Properties of Ice*.—Ice is hard, brittle, and transparent. The children can pick up ice with their fingers; could they do this with the water before it was frozen? If they let it drop it will break. Because of this we say it is brittle. (Let the children mention other things which are brittle.) The water was transparent, and when it was frozen it still remained transparent. (Get from children the meaning of the word. Compare appearance of ice with that of glass.)

(c) *Uses of Ice*.—(1) To skate upon. (Let the children tell of the fun they have during frosty seasons.) Warn as to dangers of ice skating, and put in a word or two of advice.

(2) To help the doctor when anyone is ill. How? (Tell how, in fevers, a piece of ice in the mouth cools and eases the patient. Ice bandages are wrapped round the head for the same purpose.)

(3) To make cool drinks, such as iced lemonade and ginger beer. These drinks are especially refreshing in summer weather. Ice is used in the making of ice cream. Who likes this?

(4) To preserve food. Meat and fish keep sweet and fresh if preserved with ice. (Tell the children that much meat is brought

across the sea for thousands of miles. Because this is frozen before it is packed it arrives here quite wholesome.)

ASSOCIATION.—Compare snow with rain.

1. When the very tiny drops of water run together they make rain-drops. These raindrops splash down on the ground.

2. Rain is useful. It cleanses the air, and, trickling down to the roots of plants, feeds them.

1. When the tiny drops of water freeze they become snowcrystals. Several of these crystals joined together make a snowflake, which flutters down to the earth.

2. Snow is useful too. It cleanses the air, keeps the plants alive and warm, and, when melted, it forms water, which sinks into the earth.

FORMULATION:

"His wintry north winds blow,
Loud tempests rush amain;
Yet His thick showers of snow
Defend the infant grain."

APPLICATION.—Let the children draw snow scene or snow crystals on brown paper. A blackboard sketch of a peaceful snow scene, with the following words printed beneath, would be effective:

"Every pine, and fir, and hemlock
Wore ermine too dear for an earl;
And the poorest twig on the elm tree
Was ridged inch deep with pearl."

—Lowell.

Explain meaning of words and let the children repeat them.

Phonetics

PART I.—*Breathing Exercise*. PART II.—*The "ice c"*

(i) The command is given: "Arms raising upwards with breathing—one, two!" (For starting position and directions, see drill for 2nd Week, Autumn Period.) The breath must not be forced, but should flow regularly and calmly. The time for each breathing-in and out should be the same as that taken in ordinary respiration.

(ii) Teacher shows record: a drawing of boys sliding on ice. She points to the word "ice" printed in the corner, and tells children to build it. They give the long "i" sound to the first letter. Teacher asks why. The terminal "e" is not sounded, so that nothing remains to children but to give the soft "s" sound to the "c" in "ice". They

tell teacher that the symbol usually stands for "c" (hard as in "cat"). Teacher says that, because this is so, in order to distinguish the two sounds to "c" they will call the soft sound the "ice c". She asks how the sound is made. Children tell how they put their teeth together, and, with tongue drawn back, blow gently through them.

Teacher tells children that all the words

they are going to build contain the "ice c". They build such words as: Twice, rice, advice, recite, cinder, brace.

Blackboard reading: "Jack Frost makes pretty lace work on the trees. He is certain to nip our faces as he dances by. Let us race on the ice. It is nice. Jack Frost calls himself 'Prince Ice'. He says the snow is his princess. Which is nicer, snow or ice? Who can recite a piece of verse about the ice?"

Number

Number 20.

(i) Notation of 20. Children pick 19 sticks out of their boxes. They tie 10 of them in a bundle, and leave 9 loose in another group. Teacher tells the children to write the figures which stand for the

19 sticks. They write $\overset{\text{T.}}{1} \overset{\text{U.}}{9}$. Teacher holds up another stick, and tells children to do the same. "How many sticks altogether?" They put it with the 9 units. "How many units now?" "Here are 10 units and the 'Units House' will only hold 9 units. What must be done?" Children suggest tying the 10 units into 1 bundle or "family" of 10. "Now they can be put in the 'Tens House'. There is already one family of 10 units there. How many families now?" Children write 2 under T. "What about the units house?"—Empty. Children put 0 under U to show there are no units there

now. In this way they see that 20 is the sign for twenty.

(ii) Facts about 20.

(1) Twenty shillings = one pound ("sovereign"). The children play shopping with cardboard coins. Teacher has a short chat with children about the comparative values of gold and silver. Under this heading the children learn that 10 is the half of 20, \therefore 10 shillings are half a sovereign.

(2) Twenty hundredweights make one ton. Children tell about the coalman who brings the coal in bags of a hundredweight. Twenty such bags weigh one ton. *N.B.*—Teacher ignores any mention of other weights than these two at this stage.

(3) Twenty of anything is often called a score. In some districts, flour, potatoes, &c., are bought by the score. In such localities the teacher will have no difficulty in explaining the meaning.

Story—PRINCESS ELLA

Long ago, in the days of the fairies, a king and queen of this country were in great trouble. Their two sons, fine young men, had been taken from them by the Ice King. He was a very cruel king, who lived in the far north. None of the people who had been taken away by him had ever returned.

So the King and Queen wept for their sons as if they were dead. But sorry as the King and Queen were, their little daughter was still more sorry. At night she could not sleep for thinking of them.

Ella—for that was her name—was not a very pretty girl. But she had lovely hair,

and one of the sweetest voices in the world. One night, as she lay crying, she thought she heard a voice saying to her, "Do not fear to try to save your brothers, Ella. You love them dearly, and love overcomes all things."

So in the morning she told her father and mother that she was going to look for her brothers. "Nonsense, child!" said they. "You will never succeed. No one ever gets free from the Ice King." "Indeed, I must try," said Ella. "I can only do my best." So she set off, and walked far, far away to the north.

At last, quite tired out, she came to the land of ice and snow, where the cruel King lived. Soon she found her way to his palace. Everything was white and cold. No one was to be seen; nothing but ice, ice, ice, that sparkled in the light of the sun. Ella entered the palace. In the middle of it she came to a great hall; and there, sitting on a great white throne of ice, was the Ice King.

The King spoke not a word to Ella. He, too, was of ice, cold and clear; so clear that she could see his icy heart beating in his body. She threw herself at his feet, and begged him to set her brothers free. But the King only looked at her grimly with his cold eyes. The little Princess was overcome with grief. She pleaded with the King again and again, but he sat still as a stone, and took no notice of her. When she was almost in despair, the voice she had heard before said to her: "Be not cast down, Ella. Sing him your sweetest song, and his heart will melt. At the same time, weave a net to throw over him."

She began at once to sing with her wonderful voice. But how was she to make a net? She had nothing to make it with except her long hair. This she cut off in a moment, and with nimble fingers began to weave a net, singing as she worked. After

many weary hours the net was finished, and she then threw it over the King. But she saw no change in him. Her voice was worn and harsh, and she could hardly sing another note. Tears rolled down her face as she thought all her work was in vain. However, just as her voice quite gave way, she saw the King's heart begin to melt.

At the same time the pillars, that held up the roof of the hall, began to break. She had just time to rush outside, when down came the palace to the ground with a crash. Poor Ella thought that her end was come. She covered her face with her hands and sobbed aloud. But a voice that she knew called her; she looked up, and behold from out of two of the pillars sprang her brothers! They caught her up in their arms and kissed her, so great was their joy to be together once more!

The brothers told Ella how the Ice King had caught them, and by his arts had turned them into pillars of ice. They had never expected to see her again. Full of joy they set off to their own country. But when they came near their own home, Ella hung back. She began now to be afraid. For she said: "I was not pretty when I set out. All that I had to make people love me was my voice and my hair. Now my voice is cracked, and my hair is gone." But her brothers took her home. "Come, sister," they said, "you will be loved for your brave, loving deed."

The King and Queen were delighted to get their sons back again. But when they saw Ella, who stood still, hanging her head with shame, they could hardly believe it was their daughter; she was so altered. But her father said: "Ella, to me you are still beautiful, for I love only the soul of goodness that shines through your eyes. If any think otherwise, it is they who are unworthy, not you."

Now, as he said this, everyone cried out,

"Oh, look! she has become more lovely than ever she was before." All eyes were turned on the Princess, and behold! her hair had become, in an instant, longer and more beautiful than it had ever been before. When she spoke, too, her voice was sweeter

than the sweetest music. While all were still with wonder, the voice that had spoken to Ella in the night was heard saying, "As love overcomes all, so it changes all. Love has won, and dear Ella shall be happy."

—Blackie's *Palmerston Readers*.

Other stories:—"The Snow Man"—Hans Andersen. "The Snow Queen"—Hans Andersen. "Story of the Year" (Last Part)—Andersen. "Legends of the North Land"—Cary. "Snowdrop and the Dwarfs"—Grimm. "Mother Snow, or the Widow's Two Daughters"—Grimm. "Snow-white and Rose-red"—Grimm.

Song—"IN WINTER"

—*Song Garden for Children* (published by Edward Arnold).

Game—THE NORTH WIND DOTH BLOW

—Old Tune, Words Adapted.



1. The North Wind doth blow, And down falls the snow, And what will the bare earth do then? Poor thing! With a white blanket warm, We'll keep her from harm, Till spring-time comes back once again. Poor thing!

2. The north wind both blow,
And down falls the snow,
And what will the children do then? Poor things!
They'll hop, skip, and run,
With snowballing fun,
Till springtime comes back once again. Poor things!

3. The north wind doth blow,
And down falls the snow,
And what will the robin do then? Poor thing!
We'll throw him some bread,
And keep him well fed,
Till springtime comes back once again. Poor thing!

Directions.—*Verse 1.* The children stand in a ring and shudder as if with cold. They hold their hands above their heads and let them fall slowly, twirling their fingers to represent falling snow. All look sadly towards the ground. Line 4—The children hold hands down in front, palms downwards. They move their hands in a circle as if spreading blanket.

Verse 2. Lines 1 and 2 as in verse 1. Some boys and girls stand outside the ring, peeping between the ring-children and looking wistfully out of the window at the snow. Line 3—They spring out and pretend to throw snowballs.

Verse 3. A tiny child with red pinafore, scarf, or vest hops into the ring, and appears to be searching in vain for food. The ring-children pretend to throw crumbs, and robin hops to pick them up.

Blackboard Reading and Drawing



"Pretty little snow-flakes
Sparkling in the air,
Dancing, glancing, brightly,
Shining everywhere."

Hurrah for the beautiful snow!

Winter said: "The trees have shed their leaves and the flowers are hidden in the earth. The baby-buds are asleep in their cradles; and the grass has grown gray and old. How bare everything is! I will wave my magic wand." Then she touched all the little cloud-drops, and changed them into snow-flakes.

The snow fell so thick, the other day, we made a snow-man in the yard. We put on his head and a pipe in his mouth. is his likeness; did not he look fine! put no legs on him, so that he could run away.

But, alas! the sun laughed next morning. "Come," he said to the snow-man, "we'll surprise these children. I'll help you to run away, myself." And, sure enough! he shone on the snow-man until he melted and ran out of the yard.



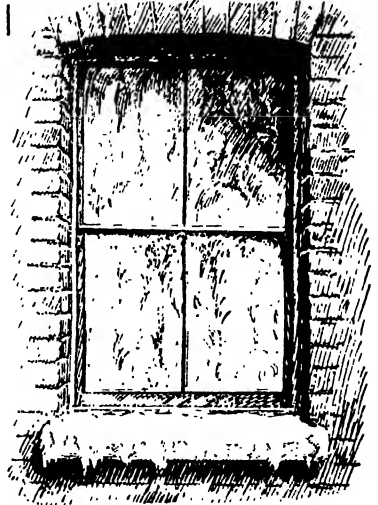


See these pretty snow-crystals. Jack Frost made them. They are just like stars. Look quickly at them before they melt away.

Jack Frost is a sly little elf. He says: 'Winter is here; it is time for me to go on my rounds. Off I go!

I do my work quietly. I am not like the big blustering North Wind who makes so much stir. Shall I tell you what I did last night?

I went to the tired old trees. 'Wake up!' I cried. 'No, No!' they creaked, 'we must not. We must wait until Spring sends our new dresses'. 'Ho, Ho!' said I, 'I will dress you up to-night', and I covered them with bright glittering beads. They looked lovely in the moonlight.



Then I climbed the hill and powdered his head with white. Next I went to the pond, and ran round and round it until the water was frozen. Fun for the boys and girls to-morrow!

Did you think I had forgotten the children? Oh, dear, no! I went to their bedroom window, but inside was so warm that I dared not go far. So instead I painted fairy pictures on the window, - forests and flowers, birds and bees. You should have seen my silver pictures when the moon shone on them."

Old
Winter
Is Here.



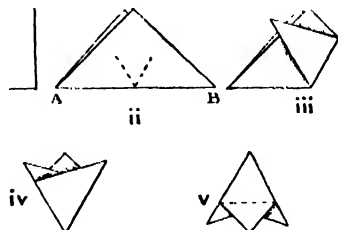
Old Winter is coming; alack, alack!
How icy and cold is he!
He's wrapped to his heels in a snowy-white sack;
The trees, he has laden till ready to crack;
He whistles his trills, with a wonderful knock,
As he comes from over the sea.

Old Winter's a rough old man to some,
As rough as ever you'll see,
"I wither the flowers whenever I come,
I quiet the brook that went laughing along,
I drive all the birds off to find a new home,
I'm as rough, as rough can be."

A funny old fellow is Winter, 'tis true,
A merry old fellow for glee;
He paints all the noses a beautiful hue,
He counts all our fingers, and pinches them too;
Our toes he gets hold of through stocking and shoe.
For a funny old fellow is he.

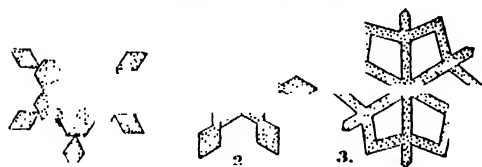
Other poems suitable for recitation:—1. "Wonderful Weaver"—Geo. Cooper, in *Recitations for Infant School*, by M. Riach (Blackie). 2. "Jack Frost"—Gabriel Setoun, in same book. 3. "Winter Time"—R. L. Stevenson. 4. "Snowflakes"—H. W. Longfellow. 5. "Frost Spirit"—J. G. Whittier. 6. "Little People of the Snow"—W. C. Bryant.

Paper Folding—PREPARATION OF PAPERS FOR CUTTING OUT OF SNOW CRYSTALS



Steps.—Fold square as in fig. ii. Find middle of line AB (fig. ii). Fold as in figs. iii and iv. Turn paper over, and cut along the dotted line (fig. v), thus making six equilateral triangles.

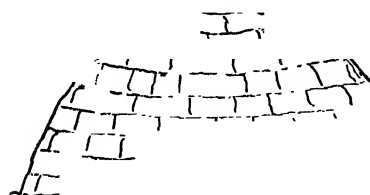
Paper Cutting



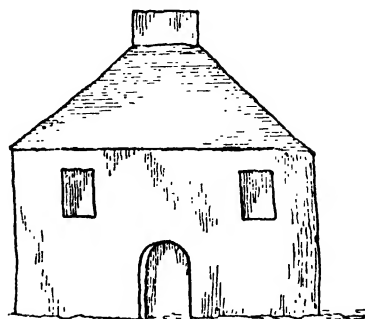
To obtain figs. 1, 2, and 3 respectively, cut according to drawings *a*, *b*, and *c*. The clippings from the first design are arranged on dark paper, as in fig. 1. Figs. 2 and 3 need no arrangement.



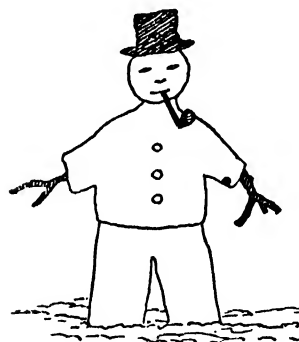
Free-arm Drawing—A HOME IN THE LAND OF SNOW AND ICE



Clay Modelling—A SNOW HOUSE

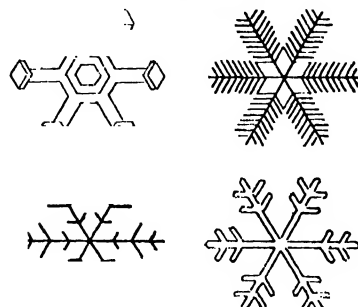


Brush Work—A SNOW MAN



Paint head, body, and legs on dark-green paper with Chinese white. When dry, add eyes, nose, mouth, hat, hands, and pipe in brown or black.

Brown-paper Drawing—SNOW CRYSTALS



On dark paper with white chalk.

Object Lesson—THE ROBIN

APPARATUS REQUIRED.—Pictures of robin, robin's nest and eggs.

PREPARATION.—Refer to last week's lesson. Children like the snow, they can play with it, and make snow houses and snow men; boys play snowballing and even girls have fun too. But while the snow is jolly for them there are other friends of the children who suffer when the snow falls. These are the birds, which are driven to the houses. Among these the most daring is the robin. (Let the children talk about its tameness and friendliness.)

PRESENTATION.—(a) **Appearance.**—Children know cock robin well with his gay red breast, brown wings, and plump little body. The mother bird is not so bright, her breast is not quite so red, possibly because she has to stay at home sitting on her nest. Why would it not be wise for Mrs. Robin to be conspicuous? (Contrast with bright red berries [Seed Dispersal lesson], which dress up gaily on purpose to be seen and to attract bird visitors.) The young robins have no red on their breasts at all. Why is this? While these creatures are helpless, it is best they should not be seen by such bird enemies as the cat and the owl. When they are older, and their wings stronger, they can wear their scarlet waistcoats as gaily as they please, because they are better able to look after themselves.

(b) **Nesting Time.**—Robins live in pairs (compare with squirrel). In spring they build their nests in all kinds of places close at hand: in hedgerows and banks, in creepers round the house, holes in garden walls, and even in church lofts.

While the nest building is going on, the cock robin sings most happily. Then, when the tiny white eggs, spotted with crimson, are laid and the mother bird sits on them,

cock robin perches on some branch close by, and trills and whistles and sings as if he were "crazy with joy". The mother bird seldom leaves her nest, and then only to get food for herself. While she is away the father takes her place and sits on the nest. Cock robin is very busy just now; he has the mother bird to look after as well as himself. When the young are hatched there are little mouths to fill. The parent birds busy themselves getting food for their nestlings. Besides this the father robin teaches the young ones to sing. How curious their first attempts must be! Next, they must be taught how to find food for themselves and be able to fly. What a time of busy loving this is!

(c) **Habits.**—The robin is one of those birds which stay with us during the winter. Why does he not need to seek other lands? Robins are very friendly little birds. In winter they are especially tame, and will come to the house for food. They sometimes even hop into a room and pick up the crumbs there. Although robins are bold towards their human friends, they are not very brave among other birds. If the children have watched the birds feeding from crumbs thrown out to them, they will have noticed that as soon as other birds come to make a meal at the same table as robin, he seizes a piece of food and flies away. He is frightened if the tiniest bird hops towards him.

In winter the robin sleeps in the warmest sheltered place he can find. A hole in a haystack is a comfortable winter home for him. A barn provides good shelter too. (Let the children sing, "The North Wind Doth Blow".) How does a robin sleep? When he clasps the branch with his feet and sits down, a muscle tightens in his toes and

holds them fast to the perch. (Refer to lesson on Birds and their Nests.)

(d) **Birds in Winter.**—It is not the cold that hurts birds in winter; they are not afraid of cold at all. They have a way of fluffing out their feathers and so making a covering for themselves through which the air cannot pass. That air which is under the feathers grows warm and so keeps the heat of the body in. It is scarcity of food which makes our feathered friends suffer. In moderate winters birds manage pretty well, but when the snow lies on the ground for long days together then they feel the pinch severely. Insect and worm eaters, such as the thrush and blackbird, can get no food whatever and starve by hundreds. Even birds which eat grain and berries are not much better off. The deep snow prevents their picking up fresh stones and gravel to replenish their gizzards, so that even if a few berries are to be had the poor birds cannot grind them. Many birds which

love to live in solitary places and scarcely ever come near towns will venture towards the houses after a long snowstorm. How can we help the birds in winter? (Suggest that the children gather the scraps from the dinner table as well as crumbs of bread. Birds which feed on insects in warm weather will relish scraps of meat and bits of gristle and fat. Birds need to drink during frosty weather, because their drinking supplies are all frozen over.)

ASSOCIATION.—Connect with what the children learned in the lesson on Birds and their Nests (Spring Scheme) and Migration of Birds (Autumn Scheme).

FORMULATION.—Robin stays with us through the winter. We must repay him for his friendliness by caring for him.

APPLICATION.—Make a bird table in the school yard, or get the children to make one at home. Encourage them to tell of the different birds which come for food. For further application see correlated lessons.

Phonetics

PART I.—*Breathing Exercise.* PART II.—*The Silent "b" in "crumb"*

(i) Teacher gives the order: "Breathing exercise, with Arms raising sideways and upwards—One! two!" Children breathe in at "one!" and out at "two!" (For other movements, see 3rd Week, Autumn, Phonetics.) Teacher takes care to see that the air is completely expelled from the lungs, although it should not be forced or jerked out unnaturally.

(ii) Teacher leads the children to talk about the cold weather and the hungry birds. She repeats:

"Robin, Robin Redbreast,
O Robin dear!
And a crumb of bread for Robin,
His little heart to cheer".

Children split the word "crumb" up into c-r-um. Before they build it on the frame, teacher tells them there is a silent letter to this word which stands like a sentinel at the end of the word. She shows "b" printed in yellow on the tablet. Why is it yellow? She compares it with the colour of the silent "k" in "knot" Other words containing the silent "b" are introduced in a story and built by the children. They print the words on their boards, colouring the silent letter yellow each time. Words for word-building: Lamb, thumb, comb, and other words contained in blackboard reading below.

Blackboard reading: It is cold to-day.

Give the robins a crumb or two. They are hopping round the door jamb. Poor dumb birds! Their limbs must be cold. Are they numb, I wonder? Climb the ladder and throw crumbs on the coalhouse roof, Jack. Jack climbed and hurt his thumb.

Number

Number 20 continued.

(i) Addition and subtraction of numbers to 20.

Sample questions:

Addition.—"Tom took his hand-cart to the shop for his mother. He carried home 2 lb. of butter, 7 lb. of potatoes, 5 lb. of flour, and 2 lb. of cheese. How many pounds did he carry?"

Subtraction.—"One day Tom carried a score of flour in his cart. The bag of flour fell off and burst. The shopkeeper gave Tom another bag, and lent him a scoop with which to pick up the clean flour. When Tom got home his mother weighed the flour. There were only 13 lb. How much had been lost?"

Addition and Subtraction.—"At the beginning of autumn mother had 20 pots of strawberry jam. She used 7 pots in making pies and 8 for the tea table. How many pots has she left?"

(ii) $10 \times 2 = 20$ $\therefore 20 \div 2 = 10$, $\therefore 10$ is one-half of 20. "How many shillings in

one pound? Divide a sovereign between two people. How much would each get? How many pounds in half a score of flour? How much would half a score cost at 2s. a score?"

(iii) $2 \times 10 = 20$ $\therefore 20 \div 10 = 2$ $\therefore 2$ is one-tenth of 20. "Mother is getting ready for Christmas. She is making 20 lb. of mincemeat. She will put it all into 10 jars of the same size. How many pounds of mincemeat will each jar hold?"

(iv) $5 \times 4 = 20$ $\therefore 20 \div 4 = 5$ $\therefore 5$ is one-fourth of 20. "Sam is 5 years old. Ned, his eldest brother, is 4 times as old. How old is Ned? Sam had 20 marbles yesterday, but he lost $\frac{1}{4}$ of them. How many has he left?"

(v) $4 \times 5 = 20$ $\therefore 20 \div 5 = 4$ $\therefore 4$ is one-fifth of 20. "Sam threw crumbs out for the birds. 4 birds flew to them at once; but before the crumbs were all finished there were 5 times as many birds. How many came? One-fifth of them were robins. How many robins?"

Story-- JENNY WREN AND BLUE-BONNET

Once upon a time there lived a little boy and a little girl named Fred and May Courtney. They used to go to school every morning—a long walk through fields and woods, where they could gather flowers and find all kinds of curious insects. There were no flowers to be found at the time I write of though, for it was the depth of winter, so there was nothing but snow and ice to be seen, and the only living things

about, besides the two children, were a few starved-looking little birds.

Fred and May were hurrying on, eating their breakfast as they went, for they were rather late for school, when a tiny bird fluttered up from the ground almost beneath their feet. It was a tit, or blue-bonnet, but it looked so ill and starved that they hardly knew what it was. Poor little thing! it went fluttering on in front of them, fixing

its bright eyes hungrily on the rapidly vanishing bread, and evidently watching for crumbs. May was still hungry, but she could not bear to see the little bird's longing eyes, for she knew that only great distress could have made it so tame; so she broke the little bit of bread which was left, in two, and crumbled it on the ground. The bird devoured it ravenously, and flew away twittering.

"What a goose you are, May! I haven't any to spare," said Fred, as May swallowed her last mouthful.

Before she could reply, out hopped a jenny wren from a low hedge, and began to go on in exactly the same remarkable manner as the blue-bonnet. Its plumage looked rough and uncared-for, and its eyes had just the same hungry look in them.

"It is starving too!" cried May, who had finished her bread, and she asked Fred to spare some of his. But Fred only shook his head, and when May asked him again he threw some pieces of dirty paper on the ground. The wren, thinking they were crumbs, flew back eagerly and picked up a morsel, but dropped it at once, and flew out of sight without uttering a note.

"How can you, Fred?" exclaimed May. "What an unkind, cruel boy you are! There," as they heard a clock striking in the distance, "we shall be late for school."

The two set off running, but they were late for all that, and in consequence were kept in after school. They had to walk home alone just as the twilight was coming on. May could not help starting nervously at some strange sounds rather like whispering she heard. Presently, to her astonishment, for all the birds had gone to roost, up flew a blue-bonnet right in front of her and alighted on her hand.

"Dear wee thing!" she cried. "Look, Fred! I believe it's the one we saw this morning." Fred stared, but made no re-

mark. The bird flew to a narrow path through the brambles, stopped, looked over its shoulder at the children, and twittered encouragingly.

"I believe it wants us to go there!" exclaimed Fred, who was always wanting an adventure, but had never come across one before. So they followed the strange bird on tiptoe for quite a long way. All the bushes and trees seemed to have been parted on purpose for them all the way. The blue-bonnet hopped on until presently they came to what looked like an enclosure of large white toadstools.

The blue-bonnet stopped and uttered a peculiar shrill little note, which was answered by another, and immediately there appeared from under one of the toadstools a jenny wren. Both birds began twittering, and hopped off hastily to another toadstool, whence a small dwarf with a large head crept out in front of them. Then, leaving May and Fred staring at the little figure, they flew away.

The dwarf was evidently a king, because he had a golden crown with diamonds that looked like dewdrops on his head, and was dressed in red and purple velvet trimmed with ermine. He looked the children well over, and began talking to them.

"It is the first time in the last four hundred years that I have happened to hold my Court where mortals have been able to invade it," he remarked with some displeasure. "I'm very sorry," faltered May. "We'll go away at once."

"Oh, you needn't trouble yourself! I don't mind at all, really," returned the little man. "Now you've come you may as well go over the Court, and see our stores. Follow me, if you please," and the tiny man walked them off to the other toadstools. At each of the toadstools was a sort of curtain which the king pulled back, revealing a dwarf sitting cross-legged before a heap of

gold, silver, and copper, which he was busily counting and sorting into separate heaps.

The children had never seen so much gold before, and were quite amazed. When they came to the last toadstool, which was larger than the others, the king said: "This is one of my treasures, and as it is the one I use for giving presents from, I have it filled with whatever my visitors like best. If you were squirrels, you would have found it full of nuts; if you were birds, full of bread crumbs or nice berries; while mice would have found toasted cheese awaiting them; and so on. As it is," he added, pushing back the curtain, "it contains gold."

"Oh-h!" exclaimed Fred, gazing with wondering eyes at the big heaps of glittering sovereigns and half-sovereigns.

"You may both take what you want of them," said the king, smiling. And Fred immediately began filling his pockets as fast as he could. May picked up three of the pretty bright sovereigns, and began thanking the king as prettily as she could. "Why don't you take some more?" enquired the king, eyeing Fred, who was shovelling away greedily.

"I don't like to be greedy!" whispered May, looking rather distressed. Whereupon the dwarf took a fat little canvas sack from his own pocket and stuffed it into May's.

"Haven't you got enough, Fred?" whispered May. "It is terribly late." So the children said goodbye, and set off through the withered bracken as quickly as they could. May's riches made her feel very happy, and Fred did nothing but talk of the wonderful things he would do with his.

Mrs. Courtney was standing at the cottage door looking anxiously for the children when

they reached the garden gate. They chattered nineteen to the dozen as they explained to the astonished mother all the wonderful adventures which had made them so late.

"It couldn't have been real gold, surely!" she exclaimed.

"Wasn't it, just?" and Fred instantly began to turn out his pockets. Oh, horrors! He dug his dirty little hands first into one pocket and then another, and tore out a mass, a heap, of rough, stony gravel. The gold had been all transformed, and poor Fred began to howl piteously.

"Oh, see, Mother," cried May; "mine have lasted!" as she untied the sack and emptied out a heap of glittering coins. Mrs. Courtney examined them carefully. "They're sovereigns, sure enough," she said, "and enough to make us comfortable for the rest of our lives. Your father will be pleased.

Fred was crying still. "It isn't fair," he sobbed. "I don't know about that," said his mother sharply; "fairies usually know what they are about. You'd better get off to bed."

May could hardly sleep for happiness that night, it was so nice to think that they would all be as rich as they cared to be. As for greedy Fred, he cried himself to sleep at last, but was tormented all night with horrible dreams of gigantic wrens, who kept guard over huge heaps of gold, and pecked him violently whenever he tried to help himself. After that day he made a regular practice of saving crumbs from his breakfast to feed the birds; and it is to be hoped that he was rewarded by the blessing of a good conscience, for the dwarfs never appeared in that part of the world again.

—Adapted from Fairy Stories told by Penelope (Blackie).

Song—ROBIN! ROBIN!

—*Little Songs for Little Voices*, by A. Scott Gatty
(Metzler & Co.).

Game—ROBIN'S BREAKFAST



2. Here comes Mrs. Robin;
She is hungry too.
In this wintry weather
What can birdies do?

3. All the trees are leafless,
Berries hid with snow;
And the ground is frozen:
Where can birdies go?

4. Nellie, get the basket,
Gather up the crumbs;
We will feed the birdies
Till the springtime comes.

Directions.—This game may be played in one large group or several smaller ones.

Verse 1. A boy with a red jersey or scarf hops about inside a garden (a ring of children, who imitate falling snow with their fingers).

Verse 2. A little girl joins Cock Robin, and they both search about helplessly for food.

Verse 3. Ring-children look questioningly at each other, as they ask: "Where can birdies go?" They shake their heads sadly.

Verse 4. A little girl comes into the garden and scatters crumbs. The robins pick them up greedily and then fly off.

Blackboard Reading and Drawing

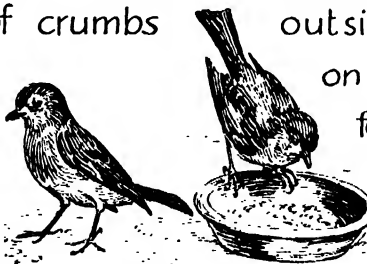
"Little Robin Redbreast sat upon a tree,
Up went Mrs. Pussy Cat, and down went he.
Down came Mrs. Pussy Cat; away Robin ran.
Said Little Robin Redbreast: 'Catch me if you can!'"



I do not think Robin said that at all; he is not bold enough. Why, he is even afraid of Cock Sparrow! He makes friends with boys and girls, and yet he flies away, if other birds come to share his dinner. What is this brown cup? It is a cocoa-nut shell. Ted Brown keeps water in it. He hung it there, so that the birds could drink out of it.

Do you feed the birds in winter?

These birds live near our home so we put them a dish of crumbs outside. They were very hungry, One day, they came and tapped on the window, as if to say, "Please don't forget us to-day, we are very hungry. The snow has hidden all our food." Poor little birds! They sang their sweet songs for us in the summer. Now, it is winter, we will not forget them.



"Robin, Robin Redbreast

O Robin dear!

We'll feed you, little Robin,

When pinching times are here."



Robin . Redbreast .

Robin, Robin Redbreast,
O Robin Dear!
And well away! my Robin,
For pinching times are here.

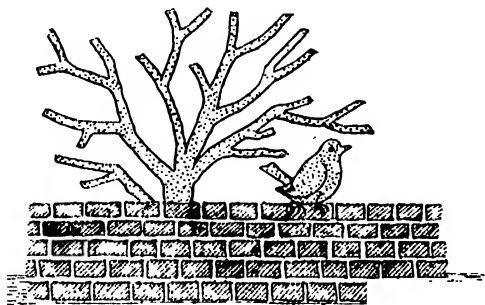
The fireside for the cricket,
The wheat-stack for the mouse
When trembling night-winds whistle
And moan all round the house;
The frosty ways like iron,
The branches plumed with snow,
Alas! in winter dark and cold
Where can poor Robin go?



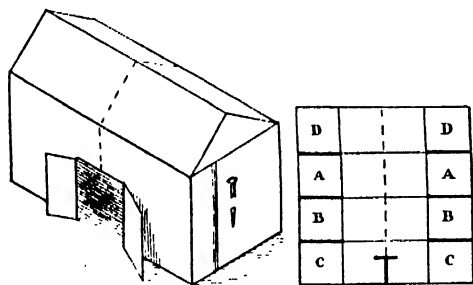
Robin, Robin Redbreast,
O Robin Dear!
And a crumb of bread for Robin,
His little heart to cheer.

Wm. Allingham.

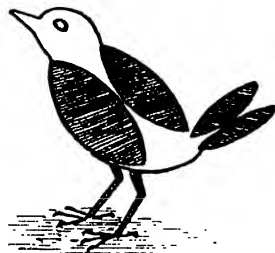
Other poems for recitation:—1. "The Robin's Story"—Book I, *Palmerston Readers* (Blackie). 2. "The Young Robins"—M. Riach's *Recitations*. 3. "The Babes in the Wood"—M. Riach's *Recitations*. 4. "Welcome, Little Robin"—*Model Poetry Book*, Infant School (Blackie).

Paper Cutting—WHERE IS DINNER?**Clay Modelling—DISH OF CRUMBS**

Break off piece of clay for crumbs, which should be added after the dish has been modelled.

Paper Folding --BARN WHERE ROBIN SLEEPS

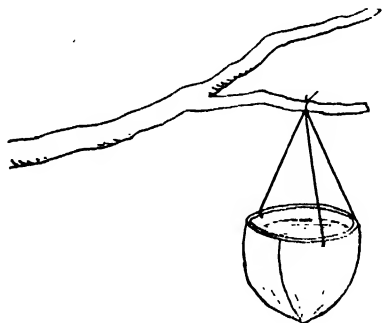
Fold for creases in fig. 2. Cut along thick lines. Pin A over B for pointed roof, and fasten C as far over D as necessary for sides of barn. Fold open the doors.

Brush Work · ROBIN

Can be done in blobs. Breast blob, scarlet; body and tail, legs and lines for head, &c., brown; ground, white.

Brown-paper Drawing—ROBIN'S BREAKFAST

Dish, blue; crumbs, yellow; falling snow and ground, white.

Free-arm Drawing—ROBIN'S DRINKING-CUP (Half a Coconut)

Object Lesson—EVERGREENS

REQUIREMENTS.—Twigs of holly, mistletoe, and ivy with berries; drawings or pictures of Christmas decoration, &c.

PREPARATION.—Although winter is bleak and bare, the children still have other friends besides the snow and robin. Last week they heard how friendly the birds are which remain to cheer us through the winter. This week they are to hear of plant friends which keep their leaves green as if they, too, desired to brighten the cold months. These plants, because they keep their leaves green all the year round, are called evergreens. Let the children name some, and show laurel, ivy, holly, and mistletoe. Encourage the children to talk freely about their appearance.

PRESENTATION.—(a) **Why Evergreen Plants can keep their Leaves through the Winter.**—Not long ago the children learned that trees, in order to survive the winter, had to shed their leaves. They did this, not only because the hardness and dryness of the soil in winter shortens the food supply, but also because leaves act as mouths, and breathing out precious moisture would then be a source of expensive waste. How is it then that the holly and other evergreens can keep their leaves on all through the cold as well as the warm months? The leaves are specially prepared for the winter. They have grown leathery, and have even developed a thick skin covering which prevents excessive loss of water. (Let the children examine ivy and laurel leaves, and remark on their toughness and brightness.)

But although this coat does well, it is not sufficient to prevent any loss of moisture at all; indeed, during hard and long frosts evergreen shrubs suffer very much. Their roots do not reach so far down as the oak and the ash, so they are not totally out of

the reach of frost. The earth is dry and hard, so that the roots can only supply a small amount of moisture to the plant. The tiny breathing holes in the stem which were open in summer are closed now, it is true, so no loss of food can escape that way; but the moisture gathered by the roots is so scant that even the little of it lost through the leaves is hard to bear.

The skin-like layer not only prevents much loss of moisture, but it acts like a jacket and keeps in heat just as a blanket would do. From all this it is seen that the evergreen plant, knowing it will have to brave the winter, prepares its leaves and stems. (Remind children of protection of stems in lesson on Sleeping Trees.)

Although these plants are called "evergreen", their leaves do not live for ever, but die off in two or three years.

(b) **Some Well-known Evergreens.**—

(i) *Holly*.—Small shrub or tree (show drawing) with smooth bark and slightly downy twigs. Leaves glossy and have waved edges with sharp spines (points). The flowers which grew in summer were small and white or greenish-white. (Make a drawing of them.) The berries are bright red and contain several "stones". What are these "stones"? Why are the berries bright? Although holly berries are good for birds they are poisonous for boys and girls to eat.

(ii) *Mistletoe* grows on many different trees, especially apple and hawthorn trees, sometimes on the oak. The mistletoe is a kind of thief, for it lives to a certain extent upon the tree to which it clings. When the sticky mistletoe berry fastens to the bark of a tree, the little root shoot curves towards the branch, and, gradually working through the bark, roots itself in the growing wood.

The mistletoe gets a certain amount of food from the air through its yellowish-green leaves, but it obtains its water supplies through its roots, which grow into the host tree. The mistletoe has the power of taking from the tree just that kind of food which it requires.

The leaves of the mistletoe are thick and leathery; why? Its flowers, which grow in spring, are small and inconspicuous. Its berries, which grow in winter, are waxen white.

(iii) *Ivy*.—A woody plant which clings or trails by rootlets. (Refer to ivy-covered cottages and walls.) Sometimes the plant grows so strong as to have a stem as thick as a young tree trunk. Besides the roots which help the plant to climb and get food for it, there are other true roots in the ground working away also. Sometimes ivy ruins walls by sapping the moisture from their crevices. This plant often kills the host tree by choking it, so that although ivy looks pretty, it is not altogether desirable either on trees or walls.

The leaves are leathery, dark green, and glossy. The veins can be seen very clearly. The leaves on the climbing stem of the plant have five divisions. (Show.) On the upper branches they are undivided and somewhat oval-shaped.

In October and November the greenish-yellow flowers grow on the upper branches. The flower stalks all radiate from one point. (Show berries.) The black berries, the fruit of the ivy, contain several little chambers with a tiny seed in each chamber.

(c) **Uses of Evergreens.**—(i) To brighten the earth in winter and to decorate the home at Christmas time. Christmas would not be half so festive if there were no evergreens in the home. (Let children tell of the fun they have dressing up the rooms in green. They can tell of the sprig of holly Mother sticks in the plum pudding.)

(ii) Some evergreen trees, e.g. fir and pine, are used for Christmas trees. Children all love this wonderful tree which “grows” presents for all.

(iii) In some countries medicine is made from the roots of the ivy. Some poor people make tea of the holly leaves in other lands (Black Forest).

ASSOCIATION.—Connect where possible with lesson on Sleeping Trees, and associate with the coming Christmas festivities.

FORMULATION.—

“When trees are bare and leafless,
And blasts are cold and keen,
Then welcome, oh, so welcome!
Is the hardy evergreen.”

APPLICATION.—See correlated lessons.

Phonetics

PART I.—*Breathing Exercise.* **PART II.**—*The silent “w” “sword”*

(i) The command given is: “Breathing Exercise with Arms circling—One! two!” This exercise should be done very slowly. After it has been done several times to counting, it can be done without in the same rhythm as normal breathing. Teacher leads the children throughout the whole exercise.

(ii) “There was a discussion in Evergreen

Land as to who should be king of the evergreens. Young Holly, who had sword points on his leaves, was proud of his glossy red berries. He thought he should be king. Who can draw the sword-pointed holly leaves? Tom, you may draw on the board. After the lesson you may all draw a sword on your boards. What is the first sound in

'sword'? Nellie, put 's' on the ledge of the word-building frame. The next sound? Sam, put 'or' on the frame, but leave a space between 's' and 'or'; something goes there which is a secret yet. The last sound in 'sword'? Jack, put 'd' on frame. Now, all 'go to sleep'. When I tell you to open your eyes you will see what the secret is which I mentioned." Teacher puts symbol "w" printed in yellow in its place in the word "sword". Children "wake up" and tell that there is a silent letter in "sword". How do they know it is silent?

The silent "k" in "knot" is at the beginning; the silent "b" in "crumb" is at the end; here is a silent "w" in the middle of a word.

Blackboard reading: Nellie is to have a party. She is writing to invite the whole of her friends. She hopes they will answer soon. If they cannot come she will be wretched. Mother will wash her party frock and wring it out. Nellie has a pink wrap for her neck. She will have a wreath of holly in her hair at the party. I hope the sword leaves will not prick her.

Number

Number 21.

(i) Notation of 21. Children have 21 sticks in their boxes. Teacher tells them to count out 20 and tie them in bundles of 10. "How many bundles? Jack, write it on the board." Jack writes: $\begin{smallmatrix} \text{t. u.} \\ 20. \end{smallmatrix}$ "Now take up another stick. We will call it a 'unit'. Where will the unit go? Why cannot it go with the ten's bundles in the ten's column? What about the 0 under 0?" Children suggest that it be cleaned off the board and figure 1 written instead, to show that 1 unit "is living in unit house". "What figures then stand for twenty-one?" Teacher asks the values of the 2 and 1. Children write 21 on their boards.

(ii) Addition and subtraction of numbers with sum not more than 21.

Specimen questions:—

Addition.—"The Wilson children went searching for holly. Mother told them to bring a nice spray full of berries for the plum pudding. Nan found one with

$4 + 5 + 6 + 2 + 4$ berries on it. How many berries? Jack saw a laurel bush with $6 + 3 + 9 + 3$ leaves on it. How many leaves? Dick saw a mistletoe bough in a shop. It had $10 + 11$ white berries. How many was that? Nan got some ivy also. She counted the root fingers. There were 7 in one part, 3 in another, and 11 in another. How many rootlets altogether?"

Subtraction.—"The children brought home 19 sprigs of evergreen. They gave their auntie 7 sprigs to decorate her home. How many left for their own home? They dressed the kitchen and dining-room with the remainder. 7 sprigs were put in the dining-room. How many in the kitchen? Their Christmas tree was 16 feet high. The room was only 11 feet high. How many feet had to be cut off the top?"

Addition and Subtraction.—"21 fir trees in a forest. The woodcutter wanted 8 of them for Christmas trees and 7 for making furniture. How many did he cut down? How many left?"

Story—THE FIR TREE

Far away in the deep forest there once grew a pretty little Fir Tree. The sun shone full upon him; the breezes played freely round him; and near him grew many other fir trees, some older, some younger; but the little Fir Tree was not happy, for he was always longing to be tall like the others.

"Oh, that I were as tall as the other trees," sighed the little Fir; "then I should spread my branches on every side, and my top would look out over the wide world! The birds would build their nests among my branches, and when the wind blew I should bend my head so grandly just as the others do!" He had no pleasure in the sunshine, in the song of the birds, or in the rosy clouds that sailed over him every morning and evening. Sometimes the merry, prattling children, as they came through the forest, would sit down near the Fir Tree and say: "What a pretty little tree this is!" and then, because they called him little, the Fir Tree would feel more unhappy than ever.

In winter, when the ground was covered with white glistening snow, a hare would sometimes come scampering along, and jump right over the little Tree's head; and then how miserable he felt! However, two winters passed away, and by the third the Tree was so tall that the hare was obliged to run round it. "Oh, if I could but grow and grow and become tall and old!" thought the Tree.

The woodcutters came in autumn and felled some of the largest trees. This happened every year, and our young Fir, who was by this time a good height, shuddered when he saw those grand trees fall with a crash to the earth. Their branches were cut off and they were laid in wagons, and horses drew them away—far, far away from the

forest. Where could they be going? What would happen to them? The Fir Tree wished very much to know, so in the spring, when the swallows returned, he asked them where the trees had been taken. They said that as they were flying across the sea they met many ships which had fine new masts that smelt like fir. Such stately ships they looked! "Oh that I, too, were tall enough to sail upon the sea!" said the Fir Tree.

"Rejoice in your youth!" said the sunbeams. And the wind kissed the Tree, and the dew wept tears over him, but still he was not happy.

When Christmas drew near, many quite young trees were felled. They were taken away in wagons, but their branches were not cut off. "Where are they going?" asked the Fir Tree. They are no taller than I; why do they keep their branches?" "We know! we know!" twittered the sparrows. "We peeped through the windows in the town below, and saw them planted in a warm room and decked out with such beautiful things: gilded apples, playthings, and hundreds of bright candles." "That is far better than sailing over the sea," said the Fir Tree. "Oh, that Christmas were come! Oh, I suffer, I suffer with longing."

"Rejoice in our love!" said the air and the sunshine. "Rejoice in your youth and freedom!"

But rejoice he would not. He grew taller every day. In winter and in summer he stood there clothed in dark-green foliage. The people who saw him said: "That is a beautiful tree!"

Next Christmas he was the first to be felled. The axe cut through the wood and pith, and the Tree fell to the earth with a deep groan. The pain was so sharp he felt faint. When he came to himself he was in

a courtyard with other trees. He heard a voice say: "This is a splendid one, the very one we want!" Then two servants came and carried the Fir Tree into a large drawing-room. He was placed in a large tub filled with sand which stood on a rich carpet.

Oh, how the Tree trembled! What was to happen next? Some young ladies began to adorn him. They hung little nets of coloured paper filled with sugar plums on his branches. Besides these were gilded apples and walnuts, and hundreds of little wax tapers. Dolls that looked almost like men and women seemed dancing among the leaves, and high up, on the top of the tree, was fastened a large star of gold tinsel.

"This evening," they said, "it will be lighted up." "Would that it were evening," thought the Tree. He thought so much about it that he had barkache with longing, and barkaches with trees are as bad as headaches with us.

The candles were lighted—oh, what a blaze of splendour! The Fir Tree trembled in all his branches, so that a candle caught one of the twigs and set it on fire. "Oh dear!" cried the young ladies and put it out at once. All of a sudden the doors were flung open, and a troop of children rushed in as if they had a mind to jump over him. They shouted with delight till the room rang again. They danced round the Tree, and one present after another was torn down. The candles burned down to the branches and were put out one by one. "What will happen now?" thought the Fir Tree. The children were given leave to strip the Tree. They threw themselves on him till all his branches creaked. If he had not been fastened with the gold star to the ceiling he would have been overturned.

The children danced about with their beautiful playthings. No one thought of the Tree any more except the old nurse. She came and peeped among the branches,

but it was only to see if perchance a fig or an apple had been left among them.

"A story! a story!" cried the children, pulling a little man towards the Tree. "I shall tell only one tale—about Humpty Dumpty, who fell downstairs, and yet came to the throne and won the princess." And the little fat man told the story of Humpty Dumpty. When he had finished, the children clapped their hands; but the Fir Tree stood quite silent and thoughtful. The birds in the forest had never related anything like this. "Who knows but I, too, may fall downstairs and win a princess?" said the Fir Tree; and he thought with delight of being next day again decked out with candles and playthings, gold and fruit. "To-morrow," thought he, "I will thoroughly enjoy my splendour. I will not tremble." And the Tree mused upon this all night.

In the morning the maids came in. "Now begins my state anew!" thought the Tree. But they dragged him upstairs into a garret, and thrust him into a dark corner where not a ray of light could enter. "What can be the meaning of this?" thought the Tree. "What am I to do here?" And he leant against the wall, and thought, and thought. Day after day and night after night passed away, and yet no one ever came into the room. "It is now winter," thought the Tree. "The ground is hard and covered with snow; they cannot plant me now, so I am to stay here in shelter until the spring. I only wish it were not so dark and lonely."

"Squeak, squeak!" cried a little mouse, just then gliding forward. Another followed; they sniffed about the Fir Tree, and then slipped in and out among the branches.

"It is horribly cold," said one of them, "or it would be quite comfortable here. Don't you think so, you old Fir Tree? How came you here? Have you been in the storeroom, where cheeses lie on the shelves,

and hams hang from the ceiling; where one can dance over tallow candles; where one goes in thin and comes out fat?" "I know nothing about that," said the Tree; "but I know the forest, where the sun shines, and the birds sing!" And then he spoke of his youth and its pleasures. The mice had never heard anything like it before. They listened very closely and said: "Well, to be sure! How much you have seen! How happy you have been!"

"Happy!" said the Fir Tree in surprise, and he thought a moment over all that he had been saying; "yes, on the whole, those were pleasant times!" He then told them about the Christmas Eve, when he had been dressed up with cakes and candles. "Oh," cried the little mice, "how happy you have been!" and they scampered away. The more the Tree thought of his youth in the forest the more clearly he remembered it. "Yes," said he to himself; "those were pleasant times! but they may come back, they may come back! Humpty Dumpty fell downstairs, and yet, for all that, he won the Princess; perhaps I, too, may win a princess!" And the Fir thought of a pretty, little, delicate birch that grew in the forest—a real, and, to the Fir Tree, a very lovely princess.

One morning, people came into the lumber-room and dragged the Tree out of the corner. They threw him on the floor, but one of the servants picked him up and carried him downstairs and outside. "Now, life begins again!" thought the Tree. He felt the fresh air and the warm sunbeams. All happened so quickly that the tree quite forgot to look at himself. In front of him was

the garden; and everything in it was so fresh and blooming. Beautiful, sweet-smelling roses grew along the walls, and clustered on the bushes. The lime trees were in full blossom, and the swallows flew backwards and forwards twittering.

"I shall live! I shall live!" He was filled with delight and hope. He tried to spread out his branches; but, alas! they were all dried up and yellow. He had been thrown down on a heap of weeds and nettles. The star of gold and tinsel that had been left on his crown now sparkled in the sunshine. One of the children who were playing in the yard caught sight of the gold star and ran to tear it off.

"Look at this still fastened to the ugly old Christmas Tree!" cried he, trampling under foot the branches of the poor Fir Tree.

The Tree looked on the flowers of the garden now blooming in the freshness of their beauty; he looked upon himself, and he wished from his heart that he had been left to wither alone in the dark lumber-room. He called to mind his happy forest life, the merry Christmas Eve, and the little mice who had listened so eagerly to him.

The servant came and cut the Tree into small pieces; heaped them up, and set fire to them. The Tree groaned deeply, and every groan sounded like a little explosion. But at each of those groans the Fir Tree thought of a bright summer's day, of Christmas Eve, or of Humpty Dumpty, the only story that he knew.

"Past, all past!" said the poor Tree. "Had I but been happy, as I might have been! Past, all past!" And at last the tree was burned.

—Retold from *Favourite Fairy Tales*, in "School and Home Library" (Blackie).

Other stories:—"Legend of the Christmas Tree". "Legend of the Mistletoe."

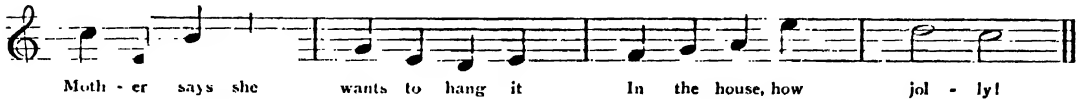
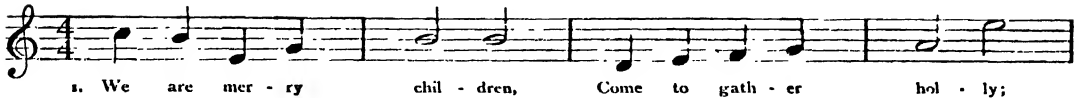
Song—"A WONDERFUL TREE"

—*Boston Songs and Games* (Curwen).

Games—I. EVERGREENS

—F. Tristram, in *Kindergarten Room* (Blackie)

2. PRICKLY HOLLY



2. See! this is a beauty!
Bright with many a berry;
Mother said: "Bring quite a handful,
Make the house look merry."

3. "I will scratch you, children,
With my sword leaves prickly,
If you try to steal my branches.
Run away now, quickly!"

4. Leave this prickly holly;
Here is ivy clinging.
Gather sprigs of shining dark leaves;
Off we go home singing.

Directions.—*Verse 1.* The children walk through the forest. Groups of tall boys with outspread arms are the trees. The evergreen-gatherers pretend to pull branches of green and put them in pinafores, baskets, &c.

Verse 2. They point admiringly towards a tall girl (holly bush), and are just about to pluck the branches, when

Verse 3. She sings this verse, and points her fingers outwards in a jerky manner. She looks very threateningly at the children.

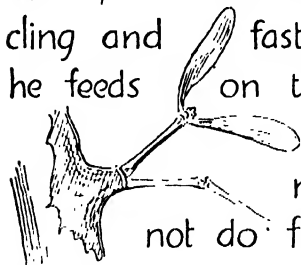
Verse 4. They turn away towards another child (ivy bush), and, after gathering ivy, they all trip out of the wood in twos and threes, holding arms as if they were loaded with evergreens.

Blackboard Reading and Drawing



"I am King Holly. You need not smile. You poor boys and girls think that no one is a king if he has not a golden crown. My red berries are prettier than any golden crown. See my glossy green robe and look what a number of swords I have at my side.

"Mistletoe would like to be king; but then, what is the use of a king who has no sword? Besides, he cannot even grow by himself, but has to cling and fasten on to other trees. See how he feeds on this apple-tree. The tree



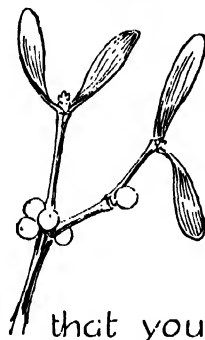
branch has been cut so that you may see his roots. No, Mistletoe would not do for a king. He does not make all his own food, but has to steal some of it. See him taking it now.

"A king should be brave. I am brave. Try to rob me of my scarlet berries and I will stab you with my swords.

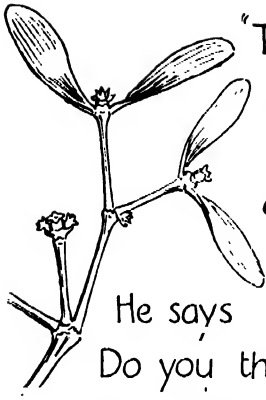
"Christmas Holly

Makes all jolly," I know; so you may a sprig or two to hang in the house. I will try prick you with my swords.

In the summer, before my berries began to grow, I had little white flowers. Here they are. What is that you say? 'small!' Wait until you see Mistletoe's flowers. Look at the picture of them over



take not to the the page



"There! you could scarcely find them on the plant; they are so small and green.

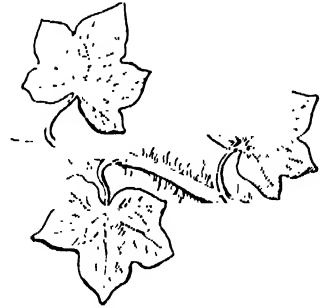
"Ivy would like to be king, too; but he does not stand alone. A king who has to lean on other things is no good.

He says his black berry crown is as pretty as mine. Do you think it is? Ivy is like the Mistletoe, he takes some of his food from the wall or tree on which he is climbing. Ivy has roots in the ground besides those in the air.



"Shall I tell you a secret we have?

"Although our berries look so different, yet they are all seed-boxes. Inside them are our little seed-children.

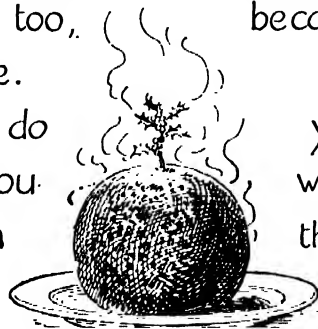


"All boys and girls love evergreens.

The birds love them too, when food is scarce.

because our berries grow

"Which of us do king? I know you so grand stuck in plum pudding."



you think should be will choose me. I look the top of the Christmas

Tall Pine Trees.



Oh you tall, tall pine trees,
All laden now with snow,
Old Santa Claus will need
you,
When stormy north winds
blow.

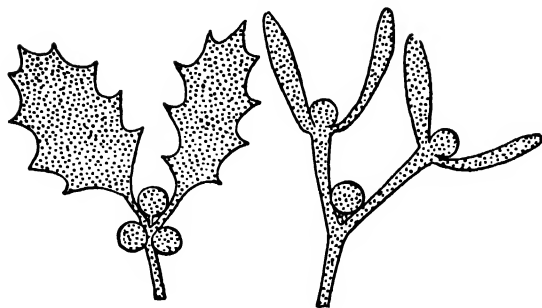
So spread out wide your
branches;
And think now, if you please,
Of happy times a-coming,
When you'll be Christmas
Trees!

- Adapted

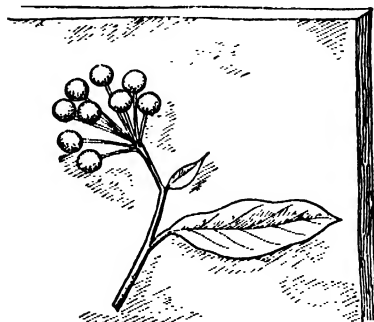


Other poems for recitation:—1. "The Evergreens"—F. Tristram, in *Kindergarten Room* (Blackie).
2. "The Holly"—Eliza Cook (Adapt).

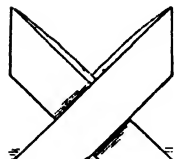
**Paper Cutting—HOLLY AND
MISTLETOE**



Clay Modelling—IVY SPRAY

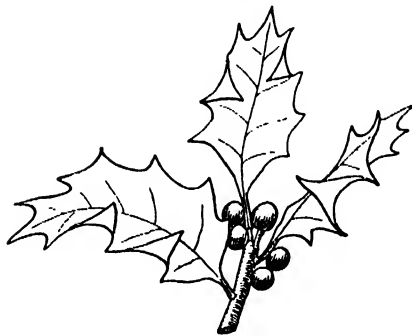


**Paper Folding—VASE FOR
EVERGREENS**



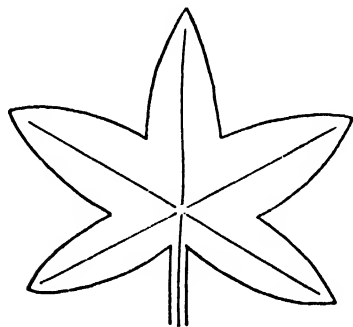
Obtain from windmill ground-form (see above sketch) by folding point X to W.

Brush Work—SPRIG OF HOLLY



Leaves, dark green; berries, crimson.

**Free-arm Drawing—CONVENTIONAL
IVY LEAF**



Guiding lines to be drawn first.

**Brown-paper Drawing—CHRISTMAS
TREE**



Colours as desired. Presents according to children's own ideas.

Object Lesson—CHRISTMAS

REQUIREMENTS.—Pictures and drawings on the subject.

PREPARATION.—Winter is bleak and cold. The days are short, and outdoor games for the children are few. In spite of all this, winter has its compensations. The children have heard about one or two winter friends, but first of all comes Santa Claus. The little ones have been looking forward for so long to Christmas week that their minds will need little preparation for the lesson. A picture, or even a word or two, will be quite enough introduction,

PRESENTATION.—(a) **What Christmas is.**—The celebration of the birth of Jesus. This should be fully dealt with in the Scripture lesson, and need only be referred to here.

(b) **The Real Spirit of Christmas.**—Christmas time is, for most people, a time of joy and mirth. Old friends meet, and families reunite. Ill feelings are forgotten, wrongs are forgiven, and happiness seems to abound. Even the poorest make some attempt at Christmas festivity. But fun-seeking and selfish pleasure alone is not the true spirit of Christmas. "Peace upon earth, goodwill to men" should be everybody's motto. At Christmas time people seem to realize how much cause they have to be thankful, and help others less fortunate than themselves. Boys and girls can remember other children who are not so well off as they. How can they put kind thoughts into practice?

(c) **Christmas Joys.**—(i) The home is made bright and gay; how? (Refer to lesson on evergreens, and let the children describe the decorations in their homes.)

(ii) **Christmas Eve.**—What a happy time this is for the little ones as they hang up their socks and stockings for Santa Claus to fill! How each child as he climbs the stairs to bed intends to keep awake and see old

Santa "for certain". Santa Claus visits children of other lands too. They call him by other names: the boys and girls of Holland call him St. Nicholas. In France the children put out their shoes for Christmas gifts. In Holland Father Christmas fills the little ones' wooden boots with toys. (Let the children talk freely about this part of the Christmas proceedings.)

On Christmas Eve the carol singers go out and sing to welcome in the happy day. When the day dawns, and time comes for service in the churches, the bells chime out merrily as if for gladness.

(iii) **The Christmas Tree.**—Usually part of an evergreen tree. (Refer to previous lesson.) Presents of all kinds for everybody in the house are hung on it. (Let the little ones tell of the presents they intend to give.) Why do they give presents? As an expression of love. How is the Christmas tree made bright?

In Norway the boys and girls remember the poor hungry birds, and make them a Christmas tree. (Ask children to suggest what the tree will be made of.) It is a sheaf of corn, which is fastened to the end of a long pole fixed in the ground. The happy birds flock round and take their Christmas presents of corn.

(iv) **Christmas Dinner.**—(Let the children talk about the turkey or goose, which is followed by the prime favourite, plum pudding.) How is the plum pudding made? Of what is it made?

ASSOCIATION.—Connect with home preparations for Christmas.

FORMULATION.—"Merry, merry Christmas!"

APPLICATION.—See correlated lessons. In some schools the teacher lets the children bring a little of the ingredients of a plum pudding: e.g. one child brings an ounce or

so of raisins; another, a pound of sugar, and so on. Then the teacher mixes the pudding before the class, and when it is all ready, rolled and tied up in a floured cloth, sends it to the cookery kitchen (if there is one) to be boiled. Just before the "breaking up" each of the little ones gets a taste.

In some schools a real Christmas tree is

provided, and presents are hung on it for the children, which they pay for themselves. The coppers brought should be strictly limited in number, or the poorer ones will envy the recipients of the more expensive toys. On "breaking-up" day some gentleman friend of the teacher, dressed up as Santa Claus, distributes the presents.

Phonetics

PART I.—*Breathing Exercise.* PART II.—*The Silent "gh" in "night".*

(i) The command is, "Breathing exercise with heels raising—One! two!" This exercise is done without any movement of arms. It will tend, perhaps more than the other exercises, towards obtaining regular and easy respiration. Starting position: Hips—firm! (For further details see exercise in 5th week, Autumn Phonetics.)

(ii) Teacher chats briefly about Christmas and Santa Claus's night visit. She lets the children repeat:

"He comes in the night! he comes in the night!

He softly, silently comes;

When the little brown heads on the pillows so white
Are dreaming of bugles and drums".

Children are told to build the word "night". The symbol for "n", the first sound, is found and put on the word-building frame. The next symbol, "i", is put on the frame. Before the children have time to put "t" teacher tells them to leave a space for a new silent symbol. She produces symbol "gh" printed on one tablet in yellow and puts it

in its place in the word. After children have built the word, they draw anything they like to represent "night"; e.g. one child might draw a candle and nightcap, another a bed, a third stars, and so on. Teacher points out that though "gh" is silent it makes the vowel "i" which precedes it take the long sound. It also often gives "ou" and "aw" the "aw" sound. Other words involving the use of the silent "gh" are read from blackboard.

Blackboard reading:—It is Christmas Eve. The Christmas log burns bright. The children are delighted. They dance lightly round in a ring. They play with a ball, and throw it high and higher. At night, when the lights are low, Santa Claus will bring gifts. Naughty boys and girls will get none. "Might I stay awake, Ma?" asks little Sadie. "I want to catch sight of old Santa. He will not frighten me." "All right, my little daughter, you may if you wish." But at night, when Santa brought his gifts, Sadie was fast asleep.

Number

Number 21 continued.

(i) $1 = 21$, $21 \div 1 = 21$, $1 \times 21 = 21$

"A number of children were at a Christmas party. There were some sweets in boxes hanging on the Christmas tree—4 blue boxes, 7 pink ones, and 10 red ones. Each

child had a box, and there was not one left hanging on the tree. How many children were at the party?" Children work:

$$4 + 7 + 10 \div 1 = 21 \quad = 21.$$

A fir tree grew 1 ft. each year. How

tall was it when it was 21 years old?"
Children work: $1 \times 21 = 21$.

"Roy saved his Saturday penny for 21 weeks to buy a present for his father. How many pennies was that? How many shillings? How many pence over?" Working: $1d. \times 21 = 21d. = 1 \text{ shilling} + 9 \text{ pence}$.

(ii) $7 \times 3 = 21$, $21 \div 3 = 7$.

"There are 7 days in 1 week. How many days in 3 weeks?" $7 \times 3 = 21$.

"Robert, Mabel, and Jane are cousins. They live in different homes. They are each to have a Christmas tree. Grandpa bought 21 pretty wax candles to share between them. How many candles for each tree?" $21 \div 3 = 7$.

"There were to be 7 Chinese lanterns on

each of the 3 trees. How many lanterns?" $7 \times 3 = 21$. "Grandma invited 7 friends for each of her 3 grandchildren to a party. How many friends altogether?" $7 \times 3 = 21$.

(iii) $3 \times 7 = 21$, $21 \div 7 = 3$.

"Father gave Mother a set of cups, saucers, and plates, 7 of each. How many pieces of china?" $1 + 1 + 1 \times 7 = 3 \times 7 = 21$.

"On Christmas Eve, Uncle Ned bought 21 oranges for the children. There were 7 children. How many oranges for each child?" $21 \div 7 = 3$.

"Aunt Sarah sent some sticks of candy. She said the 3 youngest children were to have 7 sticks each. How many candy sticks did she send?" $3 \times 7 = 21$.

Story—LITTLE JACK

Once upon a time, so long ago that everybody has forgotten the date, there was a little boy whose name was Jack. He lived with his aunt in a tall old house in a city whose name is so hard to pronounce that nobody can speak it. He was seven years old, and he could not remember that he had ever seen his father or his mother. The old aunt who had the care of little Jack was very poor. She could give him nothing but dry bread to eat, and of this there was never enough. The little fellow was often very sad; more than once he hid himself where he could not be seen, and cried as though his heart would break.

The night before Christmas there was to be singing in the church, and the school-master was to be there with all his boys; and everybody expected to be very happy, listening to the sweet music. The winter had set in very cold and stormy, and there was much snow on the ground; and so all the other boys came to the church with fur caps drawn down over their ears, and heavy coats, and warm gloves, and thick high-

topped boots. But little Jack had no warm clothes. He came shivering in the thin coat which he wore on Sundays in summer, and on his feet he had coarse stockings very much worn, and a pair of heavy wooden shoes.

It was very pleasant in the church, and the air was so warm that Jack soon forgot the cold. The boys sat still for a little while, and then, when the organ was making loud music, they began in low voices to talk to one another; and each told about the fine things that were going to be done at his home on the morrow. The mayor's son told of a huge goose that he had seen in the kitchen before he came away. It was stuffed, and stuck all over with cloves till it was as spotted as a leopard. Another boy whispered of a little fir tree in a wooden box in his mother's parlour. Its branches were laden with fruits, and nuts, and candy, and beautiful toys. Then the children talked of what Santa Claus would bring them and put in their stockings; for, of course, they meant to leave these by the fireplace when they

went to bed. The eyes of the little fellows danced with joy, as they thought of the bags of candy, the lead soldiers, and the grand jumping-jacks which they would draw out in the morning.

But little Jack said nothing. He knew that his aunt had no money to buy him good food or a Christmas tree. But he felt in his heart that he had been all the year as good and kind as he could be; and so he hoped that Santa Claus would not forget him, nor fail to see his worn old stockings, which he would hang at the corner of the mantelpiece.

At last the singing stopped, the organ was silent, and the Christmas music was ended. The boys arose and left the church, two by two, as they had entered it. Now, as he passed through the door of the church, little Jack saw a child on one of the stone steps, lying fast asleep in the midst of the snow. The child was thinly clad, and his feet, cold as it was, were bare.

The scholars, well clad and warm, passed before the strange child, and did not so much as glance that way. But little Jack, who was the last to come out of the church, stopped when he saw him, and looked at him with eyes full of pity. "Ah, the poor child!" he said to himself. "How sad it is that he must go barefoot in such weather as this!" So in the goodness of his heart he took off the wooden shoe from his right foot and laid it by the side of the sleeping child. Then, limping along through the snow, and shivering with cold, he went down the street till he came to his cheerless home.

His aunt was tired and miserable. "You worthless fellow!" she cried; "where have you been? What have you done with your other shoe?" Little Jack told her how he had given the shoe to a child that was poorer than himself. "And so," the woman said, "our fine young gentleman takes off his shoes for beggars! He gives his wooden shoe to a

barefoot! Well, we shall see. You may put the shoe that is left in the chimney, and, mind what I say, if anything is left in it it will be a switch to whip you with in the morning!"

In the morning, when the old woman arose and went downstairs, a wonderful sight met her eyes. The chimney-place was crowded with beautiful toys, and bags of candy, and all kinds of pretty things. Right in the midst of these was the wooden shoe which Jack had given to the child, and near it was the stocking in which the aunt had meant to put a strong switch. The woman was so amazed that she cried out and stood still as if in a fright. Little Jack heard the cry, and ran downstairs as quickly as he could to see what was the matter. He, too, stopped short when he saw all the beautiful things that were in the chimney-place. But as he stood and looked he heard people laughing in the street. What did it all mean?

By the side of the town pump many of the neighbours were standing. Each was telling what had happened at his home that morning. The boys who had rich parents, and had been looking for beautiful gifts, had found only long switches in their stockings.

Jack looked at his aunt, and then at the wonderful gifts around the wooden shoe. Who had placed them there? Where now was the kind, good giver? His aunt looked and wondered too. Then, as they stood in silence, they heard the voice of someone reading in the little chapel over the way: "Inasmuch as ye have done it unto the least of these . . .".

Ah! now they understood dimly how it had all come about, and even the heart of the tired old aunt was softened. Her eyes were filled with tears, and little Jack's face beamed with smiles, as they knelt down together and thanked God for what He had done to reward the kindness of a little child.

—From François Copée—*Blackie's Model Readers*.

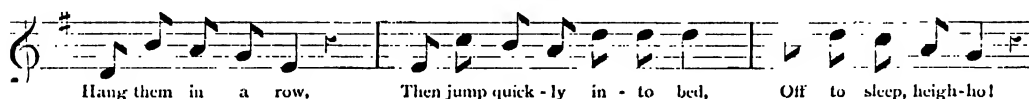
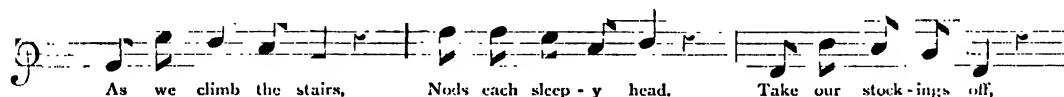
Other stories:—"King Wenceslas". "Legend of the Christmas Tree." "The Fir Tree"—Hans Andersen

Song—"CHRISTMAS BOXES"

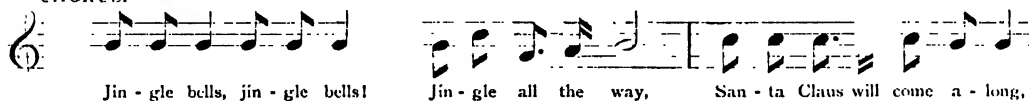
—A. Scott Gatty's *Little Songs for Little Voices* (Metzler & Co.).

Game—CHRISTMAS EVE

Tune—"Jingle Bells", by J. Pierpont.



CHORUS.



2. "All the boys and girls,
I think, are fast asleep;
Time for us to start
Through the snow so deep.
Come up steeds! heigho!
Make the sleigh bells ring;
Dashing, dashing o'er the snow,
Ring a ring! ding! ding!"

Chorus—Jingle bells, &c.

3. "Yes, they're fast asleep,
So I must not be slow;
Fill each stocking up
From the top to toe.
Now I must be off
Up the chimney flue;
Other little boys and girls
Want old Santa too."

Chorus—Jingle bells, &c.

Directions.—*Verse 1.* Four or five children sitting in a circle get up slowly and pretend to climb the stairs (lines drawn with chalk on the floor). When they reach the "bedroom" they pretend to pull shoes off and hang their stockings on the bed rail.

Chorus is sung by the remaining boys, who are Santa's horses. If tiny bells are fastened to their coats the effect will be quite festive. The girls form Santa's sleigh. They join in the chorus.

Verse 2. Santa Claus (a bigger boy) steps into his sleigh, and, taking up the reins, urges his steeds on. The horses canter round the room, the sleigh following behind. *Chorus* as before.

Verse 3. Santa steps up to the sleeping children and looks at them intently. He throws off the sack he carries on his back, and pretends to fill the stockings. When full, he steps into his sleigh and drives off. *Chorus* as in verses 1 and 2.

Blackboard Reading and Drawing



our house and
the chimney
into our bed-
room. I shut
my eyes close
lest he should
find me awake.

"It is Christmas Eve. Hang up the stockings for Santa Claus to fill. Oh, dear! I wonder if he will remember all the toys the children want! Ned would like a bat and ball. Flo wants a

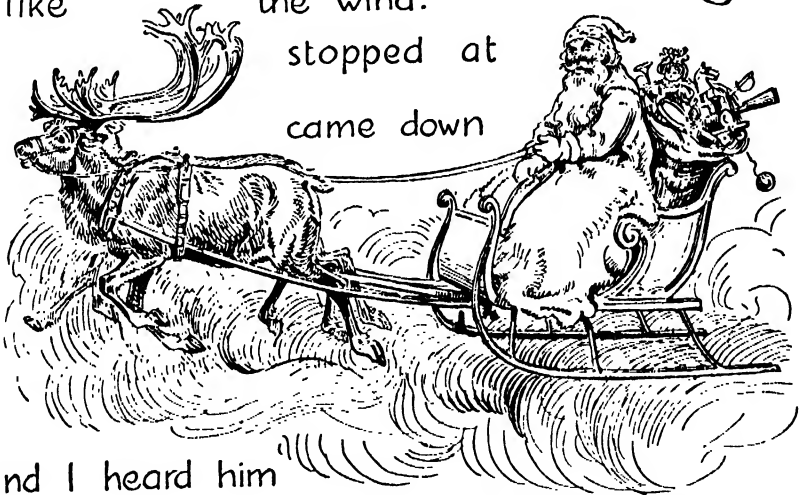


doll. Baby Jack says, 'Me want a rattle'. "Last Christmas I dreamt I saw Santa riding over the snow in his sled. His reindeer sped along like the wind.

Then he

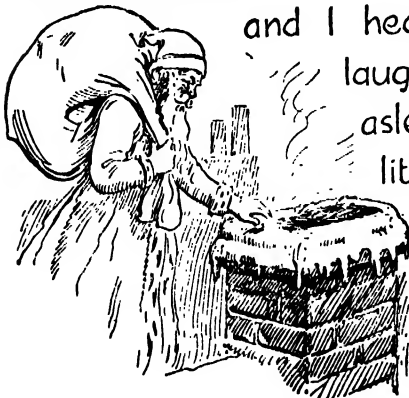
stopped at

came down



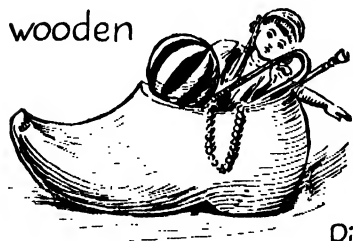
and I heard him

laugh;- 'Ho, ho! my little friends are fast asleep! Soon I opened my eyes the least little bit and saw him feeling in his bag for toys. 'Gun for Ned, tea-set for Flo, bricks for Jim,' he said, as he crammed our stockings full. Then, taking up his big sack, he whisked off up the chimney."

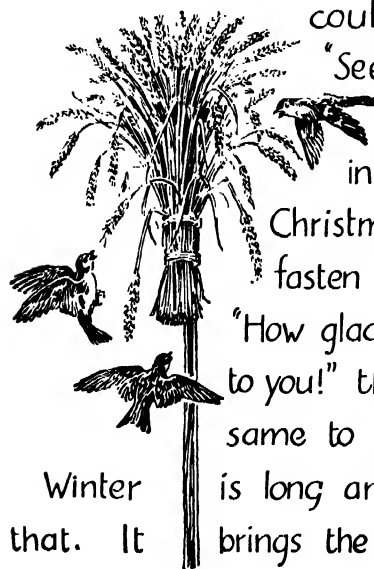


"And, would you believe it? in the morning we all had the toys I had dreamed about.

"In a land called Holland the children put out their little wooden shoes. This shoe belongs to a little girl called Gerda. What has Santa brought her?

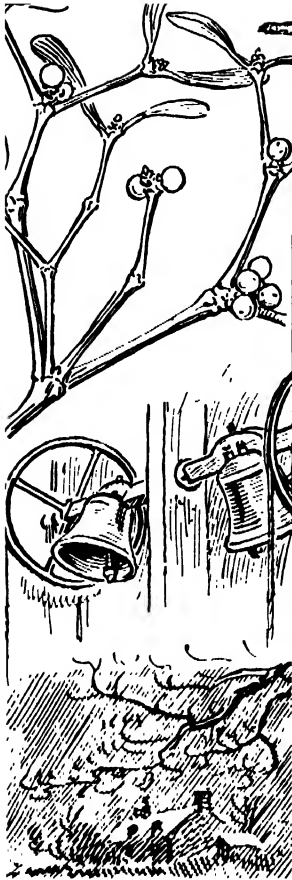


"Once there was a little girl called Piccola. Her mother said it was no use putting out a shoe for toys; they were too poor. But Piccola was certain St. Nicholas would bring her a gift; and so she left her shoe by the window. What do you think she found there in the morning? A poor little sparrow. It was thin and hungry. Piccola nursed it and fed it. She thought it the nicest gift St. Nicholas could bring!



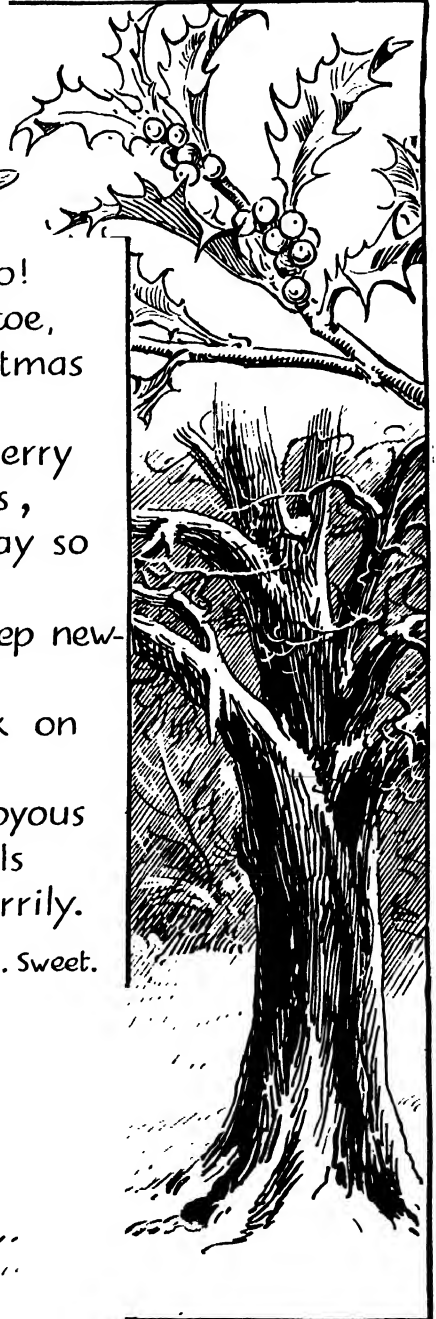
"See these happy birds! They are flying to their Christmas tree. The boys and girls in Norway want the birds to have a merry Christmas, and so they get their parents to fasten a sheaf of corn to the end of a long pole. "How glad the birds are then! "A Happy Christmas to you!" they sing to each other. "Thank you: same to you!" they chatter and chirp.

Winter is long and sometimes dreary, but we do not mind that. It brings the Christmas holidays. Merry, merry Christmas!"

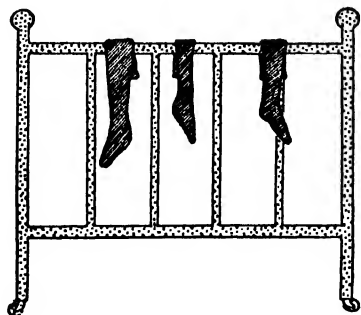


Ho! Ho! thrice ho!
for the mistletoe,
Ho! for the Christmas
holly;
And ho! for the merry
boys and girls,
Who make the day so
jolly.
And ho! for the deep new-
fallen snow,
For the lace-work on
each tree,
And ho! for the joyous
Christmas bells
That ring so merrily.

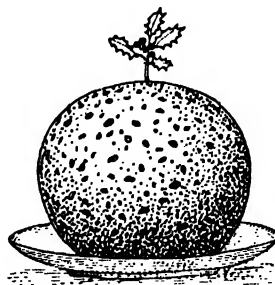
— F. H. Sweet.



Paper Cutting—READY FOR SANTA | Clay Modelling—PLUM PUDDING

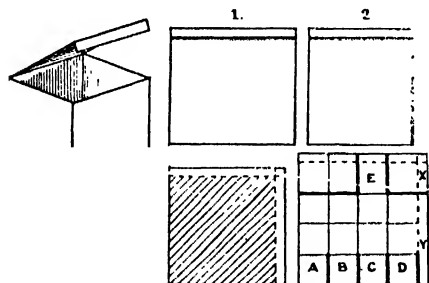


The bed should be cut separately. Stockings are pasted on mount after the bed-foot.



Tell the children to bring a sprig of holly to school for the clay plum pudding they are going to make. Mark currants out with pin. Model pudding and dish separately.

Paper Folding—PACKET FOR SWEETS



Fold a little margin on two adjacent sides (figs. 1 and 2). Divide the square that remains (see shaded portion, fig. 3) into 16 equal squares. Cut along the thick lines. ABCD gummed together form the bottom; E is the cover. The portion beyond the dotted line XY is to be gummed under adjacent side of packet when folded.

Free-arm Drawing—PRESENTS FROM SANTA



Brush Work—CHRISTMAS CARD

The children will greatly enjoy making Christmas cards. Provide each of them with a piece of stiff coloured cartridge paper, which must be folded in two. One side is to be painted with sprig of mistletoe or holly. On the inside any scrap or cut-out picture can be pasted.



Brown-paper Drawing—THE BIRDS' CHRISTMAS TREE



Object Lesson—LINEN AND COTTON

REQUIREMENTS.—Pictures of flax growing and flax being drawn through a combing apparatus; pictures of cotton picking and weaving shed (if possible). Drawings of flax and cotton flowers. Specimens of flax pods just as gathered, with fruit attached to stalks; specimens of cotton pods; tablecloth; sheet or pillowcase.

PREPARATION.—Now that winter is here the children are glad to stay indoors. The chill evenings make the fireside very welcome. (Let the children suggest how they pass a winter evening.) This is the season when boys and girls realize, more than at any other time, how good it is to have a comfortable home with loving father and mother.

So many things in the home are made from linen and cotton that the children are going to hear about these two products. (Show girls' cotton pinafores and boys' linen collars, and let the children give names of domestic articles made from these materials.) Why are linen and cotton so useful? Because they can easily be washed and ironed, and still look fresh and good. (Show that for the sake of cleanliness and health this often washing is absolutely essential.)

PRESENTATION.—(a) **Linen.**—(i) *What Linen is.*—It comes from a plant called the flax plant. (Refer to lesson on "How Seeds Grow", and remind the children that they set linseeds to grow. If a coloured record of these growing plants has been kept, it will serve admirably as an illustration here.) This plant is grown in our own as well as other countries.

When the plants have grown until their stems are from 2 to 3 feet high, and they are ready to be gathered, they are pulled up by the roots. They are dried in the sun, and then placed in water. After they have

lain some time in water the outside coat of the stalks rots away. This is just what is wanted.

The tough inside stems are separated from the rotten part, and are pulled through a sort of big comb. Why? (Compare the combing of girls' long hair.) When the fibres have been straightened they are sent to the spinning factory and made into beautiful white linen.

(ii) *The Flax Plant.*—It grows from linseeds, which are set very thickly and require much nourishment from the soil—long slender stalks, which only begin to branch out near the top. The leaves are small, rather long in shape, and pointed. The flowers are a pretty pale-blue colour. (If a record has been kept, show drawing; if not, make blackboard sketch.)

When the flowers die the fruit begins to grow. (Remind children of lesson on Fruits.) Each pod or fruit has five little rooms, with two smooth brown seeds in each chamber. (Break a few dry pods, and shake out the linseeds. Give several to each child, and let the children comment on their flat and oval shape and glossy appearance.)

(iii) *Uses of Linseed.*—(The children may be able to tell, themselves, how Mother makes linseed tea if anyone has a cough or cold. Then, if anyone needs it, she uses linseed which has been crushed into meal, and makes a poultice.) Linseeds are crushed for the oil which they contain. Painters use this oil in their paints and varnishes. The crushed linseed is sometimes made into oilcake, which is splendid food for cattle.

(b) **Cotton.**—(i) *What Cotton is.*—Cotton is made from the beautiful white woolly stuff which grows in the pods of cotton plants. (Contrast with linen, which is made from the *stems* of flax plants.)

(ii) *The Cotton Plant*.—It does not grow in this country, because it will only live in very warm lands. It grows to a height of from 2 to 3 feet. Its leaves are a rich dark green; its flowers are large and bright yellow, with purple centres. (Draw on black-board or show picture.)

When the time comes the flowers die off, just as the flax flower and all blossoms die, and leave in their places the growing fruit—cotton pods. What is there likely to be in these pods? Besides cotton seeds there is a good deal of white woolly stuff. In autumn the pods become so full of this that they burst open. It is this white woolly stuff which is made into cotton. (Show cotton pods. Contrast with linseed pods.)

Now is the cotton-picking season. (Show pictures of cotton fields, and describe their rows and rows of cotton plants. The overflowing pods make the plants look as if they were covered with snow. The women and children gather the cotton in handfuls and put it into a basket which is fastened in front of them.

The seeds are separated from the raw cotton, and are used for making cotton-seed oil. (Compare with use of linseed.)

The raw cotton is packed into huge bales and sent away to be woven. (If the children live in a district where cotton weaving is an industry this part of the lesson can be made particularly telling. If, however, the district is agricultural the teacher had better promise that when the children are older they shall hear more about the weaving.)

ASSOCIATION.—Much of this will be new to the children, so full association is not possible. The chief connecting links with what the children already know will be that the flax and the cotton-plant flowers are like other flowers the children have learned about—they change those parts which do not die into seed-boxes.

FORMULATION.—Many things in the home are made from linen and cotton. Linen and cotton are useful because they can be easily and often washed. Linen is made from the stem of the flax plant. Cotton is made from the material which bursts out of the pods of the cotton plant.

APPLICATION.—Plant linseed in a sponge, and keep it in the neck of a glass jar which is constantly supplied with water. Commence a fresh record of development. For further application see correlated lessons.

Phonetics

PART I.—*Breathing Exercise*. PART II.—“are” as in “scare”.

(i) Breathing exercise is combined with heels raising and knees bending. The order given is: “Breathing with heels raising and knees bending—One! two! three! four!” Starting position: Hips—firm! Breath inhaled on numbers one and three; exhaled on numbers two and four. (For further details see exercise in 6th week, Autumn, Phonetics.)

(ii) Teacher prints “at” (or “ab” or “ak”) on black-board, and asks children to say the sound. She then adds “e”. Children say

“ate”. Why have they changed the vowel sound? Teacher then prints “ar” on board, and tells children to say the sound. “e” is then added. Children will probably give the long vowel sound at once. If not, teacher tells them that “e” has just the same effect on the preceding vowel. The sound now is “are” (pronounced as in “scare”). She asks a child to make the word into “care”. Child writes “c” at the beginning. Another child when asked to make “care” into

"scare" puts "s". What does "scare" mean? Who has had a scare? What scared you? Teacher tells a short story about a scared child, and shows record—picture of the story, with *scare* printed at side. The symbol "are" is built into the following words: Hare, mare, rare, rarely, ware, aware, beware, flare.

Blackboard reading: "The table is *bare*. We can *spare* time from play to make tea. I *dare* say Ma will be late. She will *stare* to see it made. What kind of *fare* is there? Oh, what a *scare*! Nellie almost spilled the milk. Be *careful*, Nell. We all *share* the jam. Take *care*! Do not drop it, Tom. Jam is *rare* for tea "

Number

Number 22.

(i) Simple addition sums involving "carrying" and adding to figure already in tens column, e.g. $13 + 9$ —. Teacher tells a child to write 13 on board. He puts down

^{T. U.}
1 3. "What does the 1 mean? And the 3?" Then put up one bundle of 10 sticks, and have 3 loose in another group. Children print T. U. on their boards. They lay the bundle of 10 under T., and 3 loose sticks under U. "Jack, print 9 on the blackboard." Jack puts 9 under the 3, and teacher draws a line. "Now all put 9 more sticks under the 3 loose ones. You have your addition sum in sticks, mine is in figures. We will add the sticks, and I will write the answer in figures. We will call the sticks 'units'. $9 + 3$?" Children work $9 + 1 + 2 = 12$. They tell teacher, who writes it at the side of her board. "We cannot have all these 12 units under U. What must we do?" Children suggest taking 1 lot of 10 units from the 12 and putting it in the "tens house". They tie 10 of the sticks in a bundle,

and lay them beside the bundle already there. The 2 units left may live in the "units house". Teacher writes 2 under U. Children lay the two sticks under U. "There is already one lot of 10 units in the tens column. How many families now?" Teacher writes 2 under T. Children give the answer 22, and say "2 and 2 stand for twenty-two".

(ii) Simple subtraction sums with figures in both tens and units columns, e.g. $22 - 11$ —. ^{T. U.}Teacher prints 2 2 on blackboard. She points to left-hand 2, and asks what it means. Children put out 2 bundles of 10 sticks on boards under T., which they have previously printed. They say what 2 in the units column means, and lay 2 loose sticks under U. How many sticks altogether? They are going to take 11 away from 22. Teacher writes 11 under 22. She points to each digit of 11, and asks its value. Children take 1 stick from the 2 in units column, and 1 from 2 in tens column. They tell that the answer is 1 ten and 1 unit, which is 11.

Story—THE FLAX

A flax plant was growing in all its beauty. Its pretty pale-blue flowers were as delicate as the wings of a moth. The sunbeams kissed it and the raindrops washed it. It looked all the prettier for it, just as little

children do when they have been kissed and washed by their mother.

"People say I look well," said the flax, "and that I shall make a fine piece of linen, I am so tall and strong. How lucky I am!

To think that I am to be of some use in the world! No one, I am sure, can be happier than I am!"

"All very well," said the fern. "You will not say that when you know the world better." And it sang quite sadly:

"Snip, snap, snurre,
Basse lurre,
The song is ended".

"No, it is not ended," said the flax. "I feel that I am growing. I am the happiest creature in the world."

One day someone came and pulled the flax up by the roots. How that did hurt! They laid it in water as if they wanted to drown it. Then they put it so near a hot fire that the flax thought it was going to be roasted. Even then the flax was cheerful. "Ah well," it said, "we cannot be always happy, or we might become selfish! All this trouble will only make me wise." Poor flax! there was a great deal of trouble in store for it. It was steeped and roasted, broken and combed, and, worst of all, put on the spinning wheel. In all its pain it thought of past pleasures, and was quite contented until it was put on the loom and woven into a beautiful piece of white linen. "This is wonderful," said the flax. "To think that in spite of all my troubles I have been made into something useful! What a fine piece of white linen I am! This is better than just growing in the fields! I cannot be happier than I am now."

A lady bought the piece of linen and carried it home with her. She laid it on the table, and, taking up her sharp scissors, she began to cut it. This was painful; and when the linen was torn and stitched it thought it would die. Instead of dying it was made into twelve little garments for the children to wear. "Why," said the flax, "I have grown quite important. How useful I am

going to be! This is good fortune, to be sure!" and the flax was very happy.

The twelve little garments lasted for years; but at last they became so worn that it was no use patching them any more. The tatters said to each other, "we would have liked to have kept together a little longer, but that cannot be;" and they fell apart into rags. "Now," thought the flax, "this is the end." But no! They were torn into small pieces, put in water, made into a pulp, dried, and turned into beautiful white paper. "What a glorious surprise!" said the paper. "I wonder if I shall have fine things written upon me. I certainly am fortunate!" Beautiful poetry and stories were written on the paper, and there was only one blot, which was very lucky. The stories and poetry were read out to the people, and it made them wiser and happier.

"When I was only a little blue flower growing in the field I never dreamed all this joy was in store for me. What have I done that I should be so happy? The fern said the song was ended when I was a little plant, but it is not ended even yet! I wonder if I shall be sent all over the earth for men to read what is written upon me." While the paper thought this, it felt more joyous than ever. The more useful it was the happier it grew. But it made a mistake when it thought it would have to go on its travels round the earth. It did not know that, with being handled and read by one after another, it would get worn and torn and soiled. Instead of this it was sent to the printer, who copied the written words in type, and printed hundred of books, all with the same words.

"I never thought of that," said the paper to itself; "this is by far the best plan. But although I cannot go on my travels I shall still be happy in the thought that it was on me the first beautiful thoughts were written, it was at me the writer smiled when he read his work. I shall stay at home while the

books go to and fro through the world. How glad I am! How fortunate, too!"

The paper was tied with other papers into a bundle, and thrown into a tub which stood in the washhouse. It felt this to be no disgrace. "One cannot go on working for ever," it said; "rest is good at times. It is good to be able to consider matters, to think over one's real state. Now, for the first time, I begin to know myself. To know oneself is, after all, the most useful knowledge, and surest to lead to progress. And come what will I am sure of this that all will end in progress; hitherto it has always been so."

One day it was decided to burn all the paper in the tub. It could not be sold to the shops for wrapping up butter and sugar, because it had been written on. So the children stood round the fire to see it burn. They liked to see pretty flames dancing up and the sparks which chased each other. Then when the red sparks ran after one another they called it watching the children when school was over, and the last spark they called the teacher. Then they would wonder where all the sparks went. How beautifully they shone for a moment, and then went out!

The whole bundle of paper had been thrown on the fire, and was soon burning. "Oh, dear!" it cried, as it burst into a glowing flame; "oh, dear!" It was horrid to be burned like this. Soon, however, when all the bundle was on fire, the flames rose higher and higher. They were taller than ever the little flax plant had been at the beginning of the story, and they were

brighter than ever the linen was, even when it was new. All the letters written on the paper became in an instant fiery red, and the words and thoughts of the writer seemed to stand out in a blaze of glory.

"Now I am flying up, up, higher and higher, straight to the sun." The voice seemed to come out of the mounting flames; and hundreds of flame-voices seemed to say the same. The flames rose so high that they came out at the top of the chimney. Then a wonderful thing happened: for every flax flower that had grown in the fields there was a tiny being floating about above the flames. These were even more beautiful and sweet than the flowers from which they were born, and they were daintier and lighter than ever the flower petals had been. Soon the flames died out, and nothing was left but a heap of black ashes. Over these the little beings danced; wherever they touched the black, bright red sparks were seen.

"The children have all run home, and the teacher came out of school the last," said the watching children to one another. It had been a great pleasure to them to see the pretty sight, and as they stood looking at the ashes, they said:

"Snip, snap, snurre,
Basse lurre,
The song is ended".

But the beautiful invisible beings said: "The song never ends; the best and happiest is yet to come."

But this the children could not hear, and, if they did, they could not be able to understand it. Children, you see, must not know everything.

—Retold from Hans Andersen.

Songs—1. "BABY-LAND"

—F. Swift, in *Beecham's Portfolio*, Vol. XI.

2. "GRANDMA"

—Wade Whipple, in *Beecham's Portfolio* Vol. XI.

Game—MAKING TEA



1. Put the ket - tle on the fire— Near - ly time for tea,
 Fa - ther will be com - ing soon, Hun - gry as can be,
 Spread the white cloth smooth and straight; Press the folds out so,
 Bring the cups and sau - cers now; Place them in a row.

2. In each saucer put a spoon,
 Shining bright and clear;
 Then a small plate for each one—
 Dad will soon be here.
 Bring the sugar basin now,
 And the cream jug too;
 Mother, let us have some cake;
 Please, dear mother, do!

3. Cut the bread and butter; now
 Put it on the plate.
 All is ready; Father comes,
 Not one minute late.
 Hark, the water's boiling now;
 Mother brews the tea;
 Put the chairs all round and sit
 Happy as can be.

Directions.—This game is most suitable for the classroom. The teacher's table can be used for tea-table. Real crockery and other articles should be used. Only a few children take part in the laying of the table, but the game can be played any number of times to give each child a part. The words suggest the actions. The eldest girl can be Mother, who gives her consent to cake for tea and brews the tea. A big boy can be Father, who, coming in, pats the children's heads.

Blackboard Reading and Drawing



"Look at me. I am a Flax Plant. Don't you think my pale-blue flowers look sweet? I grow in a field with thousands of other flax plants.

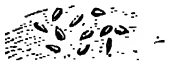
The man who set us there comes to see how long our stems are growing. I think most of how soon my seed-babies will grow.

"Hush! don't tell; but even now my little seed-boxes are ready. I have five tiny rooms in the seed-box of each flower. There! I knew that would surprise you.

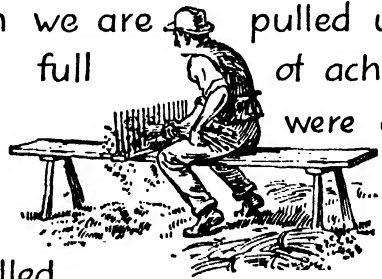


"When the summer goes my flowers die; but I do not care a bit. I shall leave behind me tiny brown seed-children.

If they are planted, they will grow into flax plants like me. Do you know what they are called? I think you do. Who likes linseed-tea?



"When all the plants are full-grown we are pulled up and laid in water. We lie there full of aches and pains, until you would think we were of no more good. Then when the outside coats have rotted off our stems, we are tied in bundles and pulled through combs, like the one above, to make us ready for spinning. Then we are woven into long pieces of linen. The linen is sent to the shop. Your mother buys it to make pretty collars for the boys."





"I am a Cotton Plant. You boys and girls do not know me, I am sure. I do not grow where you live; it is too cold. All the children who play in the cotton fields are black.

"They love my pretty yellow flowers as much as you love your dandelions and buttercups.

"I grow about as tall as the babies in the babies' class. The other cotton plants and myself are all planted in rows. The cotton field looks pretty in summer with its rows and rows of dark green leaves and yellow flowers.

But, it is best of all in autumn when the white cotton is bursting out of the pods.

"It looks as if some one had thrown handfuls of snow on the dark green leaves.

"I am a very useful plant. I do not think you could

do without me. Think what a lot of things are made of cotton, and then you will agree that I am most useful.

"The little black pickaninnies know me well. They roll about in the sun while their black 'mammies pick the wool from my pods."



The Cottager to her Infant.

The days are cold; the nights
are long;
The north wind sings a doleful
song;
Then, hush again upon my breast:
All merry things are now at rest
Save thee, my pretty love!

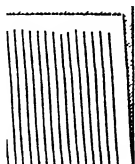
The kitten sleeps upon the hearth;
The crickets long have ceased
their mirth;
There's nothing stirring in the
house
Save one wee hungry nibbling
mouse;
Then why so busy thou?

— W. Wordsworth.



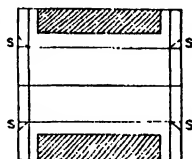
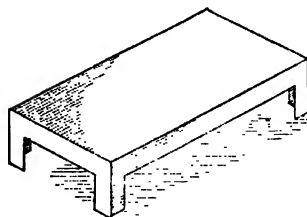
Other poems suitable for recitation:—1. "When the Tablecloth is Laid"—"Hiding", in M. Riach's *Recitations for Infant Schools*. 2. "The Land of Counterpane"—R. L. Stevenson.

Paper Cutting--WEAVING OF TABLECLOTH



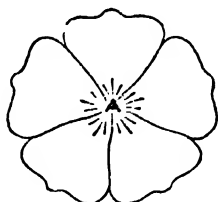
Fold a piece of paper, and cut from fold to about 1 inch from edge of paper in parallel lines. Cut a similar piece into long strips. Weave as in drawing.

Paper Folding--KITCHEN TABLE FOR LINEN CLOTH



Make a little crease down two opposite sides. Fold across into four oblongs. Cut away shaded portions. Gum tops of legs at S.

Free-arm Drawing--CONVENTIONAL COTTON FLOWER



Let the children make the guiding lines shown in side sketch, and then fill in edges of petals.

Clay Modelling--COTTON POD



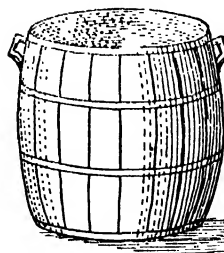
To be modelled from actual specimen. The shape of pod varies according to species.

Brush Work--COTTON PICCANINNY



This looks effective when painted on rich red paper. Dress, eyes, nose, mouth, white; head, hands, and legs, black.

Brown-paper Drawing--HOW THE TABLECLOTH IS WASHED



Colours as desired.

Object Lesson—COAL MINE

REQUIREMENTS.—Pictures of pit mouth, mine shaft, miners at work in the mine, Davy safety lamp (this may be borrowed from a child's parent if there is one who works in the coal mine), drawings of hammers, pickaxe, spade, wagons, cage, &c.

PREPARATION.—Let the children tell how they spend their winter evenings. Lead them to talk about the cosy fireside. The cheerful fire is another winter friend of the children. Country people burn logs of wood and sticks which they pick up in the woods. In towns it is not possible to find wood like this, and so the townsfolk have to depend upon coal. Who brings the coal to the coal cellar? Where does the coal dealer get it from? A visit to the coal-pit yard would form a good introduction to the lesson.

PRESENTATION.—(a) **What Coal is.**—Long, long years ago, trees and plants of all kinds grew very big. They were so great that ferns in those days were as big as our trees to-day. When these grew old they fell and were covered up by the soil and water. Then more trees grew above them, and, when they fell, they in turn were covered up too. Fresh trees and plants grew above these and in turn fell. This falling and covering-up continued for long years, so that in time the oldest plants sank lower and lower in the earth. After many, many years these plants decayed and became hard. As the years went by they became harder still, until at last they formed the hard coal which we use for burning in our fires. Coal, then, is the remains of great plants which once grew in the sunlight, but as years went on sank lower in the earth and became covered over.

(b) **Where Coal comes from.**—Such a long time has passed since the trees and plants decayed, and so very many fresh

layers of earth and vegetation have covered them, that when men seek them, in their present form of coal, they have to dig deep into the earth. The places where men work at getting the coal are called coal mines.

(i) *The Shaft.*—This is the entrance to the coal pit. The miners go down in cages or buckets to the mine, which is at the foot of the shaft. The shaft is sunk to the first layer of coal. When the coal is mined it is sent up to the pit mouth by way of the shaft. The empty buckets are sent back down the shaft. The sides of the shaft are often bricked up; why? (Show how dangerous to miners it would be otherwise.) Air is pumped through the shaft into the mine by means of fans. (If there is a fan at work in the school let children see it; if not, do not mention the means employed, as the little ones would not be able to understand it.) Why is it necessary there should be a supply of fresh air?

(ii) *Galleries.*—From the bottom of the shaft the miners dig in side galleries as far as the seams of coal reach. The coal is brought to the foot of the shaft by ponies, mules, or wagons which run on rails. Sometimes the coal is hard to get at and it has to be blasted out. (Compare with strength of gunpowder in fireworks, which the children often see bursts the outside covering of the "cracker".)

(c) *The Miner.*—If the children live in a mining district get them to tell about the collier and his appearance when coming home from work. Why does he look so black? The work of the miner is hard and dangerous. When coal seams are narrow he has to lie on his back or side and pick away at the coal for long spells in this uncomfortable position. (Picture the discomfort of working where one cannot stand

upright.) Besides this, the coal mine is dark. How is that? This must add to the difficulty of the miner's work. The mine is lit with lamps which the miners carry with them. Sometimes they fasten their lamps on their hats; why?

Sometimes coal mines become filled with poisonous gases which suffocate the workers or cause explosions. These gases are sometimes so strong that if a miner had to strike a match it would cause a great explosion. How then can the mine be lit without danger? Some time ago a man named Davy thought of a lamp which could be used without fear of explosion. He called it a safety lamp. (Show Davy lamp and let the children see that the name "safety" is quite applicable to it.) So great is the danger in mines that the men are forbidden

to make or use any other kind of light whatever.

Another danger of the mine is flooding. Sometimes the mine gets filled with water and the walls give in. How thankful we should be to the brave men who risk their lives in order that we may have coal for our fires!

ASSOCIATION.—Associate with mining industry if this is local. Remind children how they learned in the lesson on trees that nothing was wasted. Even old trees become useful coal.

FORMULATION.—Coal was once great plants which grew above the ground.

After many, many years these plants sank into the earth and were changed into coal.

The miner's work is hard and dangerous.

APPLICATION.—See correlated lessons.

Phonetics

PART I.—*Breathing Exercises.* PART II.—"ire" as in "fire".

(i) (a) Command given is: "Breathing with Arms raising sideways and Heels raising—One! two!" Breath taken in at "one!" and expelled at "two!" (For further directions, see exercise in the 7th Week, Autumn, Phonetics.)

(b) Command given is: "Breathing with Arms raising upwards and Heels raising—One! two!" The heels are raised as the arms go upwards. Breath inhaled at "one!" exhaled at "two!" (For other details, see 8th Week in Autumn, under Phonetics heading.)

(ii) Teacher refers to "are" in "scare" of last week, and asks what effect the final "e" had when added to "ar". She prints "ir" on board. What is the sound? "e" is added. "What is the sound now? Why the long "i" sound? Who can make "ire" in "fire"? A child prints "f" at begin-

ning of 'ire'. Who has watched Mother light the fire? How does she do it? After a brief chat, children build "fire" on the word-building frame. They change it into "mire" by substituting symbol "m", which is lying amongst other symbols on teacher's desk. The following words are built in this way: Hire, tire, wire, spire, squire.

At conclusion of lesson children make a drawing of a fire on boards and print "fire" at the side.

Blackboard reading: Emma poked the *fire* and made it blaze. How hot it was! It made the children perspire. "Oh dear, I must retire," said Dick; "it is hot near the *fire*." Dad is writing in the *firelight*. He has a *quire* of paper by him. He is writing to *Squire* Jackson. He wishes to *hire* a trap. He will take the children for a drive but not by the *mire*.

Number

Numbers 22 and 23.

1. Number 22. (a) *Addition of Numbers to 22*, e.g.—“Sam carried the coal from the coal house for his mother. One week he carried $8 + 4 + 3 + 7$ bucketfuls. How many buckets of coal was that?”

(b) *Subtraction*.—“There were 22 sacks on a cart. 19 of them were filled with coal and the rest with coke. How many bags of coke?”

(c) *Addition and Subtraction*.—“At the beginning of winter, Mrs. Brown had 22 hundredweights of coal and coke put in her coal cellar. She has burned 14 hundredweights of coal and 3 hundredweights of coke. How many hundredweights left?”

(d) *Multiplication and Division*.—

(i) $22 \div 1 = 22$; $22 \times 1 = 22$.—“A coal dealer took out on his cart 22 bags of coal. He left 1 bag at every house where he called. He had none left when he got back to the coal yard. At how many places did

he leave a bag? He was paid 1s. for each bag. How much had he when he returned? How many pounds was that? Shillings over?”

(ii) $22 \div 2 = 11$; $11 \times 2 = 22$.—“Mrs. Nelson has the dining-room and kitchen fires burning all winter. Each fire burns the same amount of coal. 22 bags have been used already. How many bags for the kitchen fire? Walter and Nan Nelson roasted chestnuts. They had 11 each. How many altogether?”

(iii) Mrs. Nelson boiled toffee for her 2 children and their 9 cousins. How many children altogether? She made 22 oz. Each child had an equal share. How many ounces had each child? How much did the 22 oz. of toffee cost at 1d. per oz.?”

2. Number 23. Addition, subtraction, multiplication, and division of numbers where the sum, subtrahend, product, and dividend respectively do not exceed 23.

Story—THE STORY OF SIEGFRIED

Long, long ago, before the sun learned to shine so brightly, people believed very strange things. Even the wisest thought storm clouds were war maidens riding, and that a wonderful shining youth brought the springtime; and whenever sunlight streamed into the water they said to one another: “See, it is some of the shining gold, some of the magic Rhine-gold. Ah, if we could find the Rhine-gold we should be masters of the world—the whole world!” and they would stretch out their arms and look away on every side.

Even little children as they played began looking for the hidden gold; and they say that Odin, a god who lived in the very

deepest blue of the sky, came down and lay in the grass to watch the place where he thought it was.

Now this gold was hidden in the very deepest rocky gorge, and a dragon that everyone feared lay upon it night and day. Almost all the people in the world were wanting and seeking this gold; it really seemed sometimes that they were forgetting everything else. Some of them went about dreaming and thinking of all the ways there were of finding it. But they seldom did anything of all they thought, so they were called the Mist-men.

There were others who worked always digging in the darkest caverns of the moun-

tains; living underground, they almost forgot the light of the sun, so eager were they to see the glow of the gold. These were called the Earth-dwarfs, for they grew very small and black, living away from the light. But there were a great many blessed ones who lived quite free and glad in the world, loving and serving one another, and not thinking very much of the gold.

There was a boy whose name was Siegfried, and, though he lived with an Earth-dwarf in the deep forest, he knew nothing of the magic gold or of the world. He had never seen a man, and he had not known his own mother, though he often thought of her when he stood still at evening and the birds came home. There was one thing she had left him, and that was a broken sword. Mimi, the Earth-dwarf, strove night and day to mend it, thinking he might slay the dragon who guarded the gold. But though he worked always it was never done, for no one who feared anything in the world could weld it, because it was an immortal blade.

Each evening when Siegfried thought of his sword he would come bounding down the mountains, blowing great horn blasts. One night he came laughing and shouting, and leaped into the cave, driving a bear he had bridled. Mimi was frightened as he saw the bear coming straight towards him. He ran round and round, and darted here and there, until Siegfried could go no more for laughing, and the bear broke from the rope and ran into the woods.

When Siegfried turned he saw that the poor little dwarf was crouched trembling behind the anvil, and he stopped laughing and looked at him.

"Why do you shake, and cry, and run?" he asked.

The dwarf said nothing, but the fire began to glow strangely and the sword shone.

"Do you not know what fear is?" cried the dwarf at last.

"No," said the boy, and he went over and took the sword; and lo! the blade fell apart in his hand. Mimi and Siegfried stood still and looked at each other.

"Can a man fear and make swords?" asked the boy.

The dwarf said nothing, but the forge fire flashed and sparkled, and the broken sword gleamed in the strangest way. The boy smiled, and gathering up the pieces, he ground them to fine powder; and when he had done he placed the precious dust in the forge and pulled at the great bellows. The fire glowed into such a shining that the whole cave was full of light.

The dwarf grew blacker and smaller as he watched the boy. When he saw him pour the melted steel in the mould and lay it on the fire, and heard him singing at his work, he began to rage and cry; but Siegfried only laughed and went on singing. When he took out the bar and struck it into the water there was a great hissing, and the Mist-men came and stood then with Mimi, and they raged and cried together. But still Siegfried only laughed and sang as he pulled at his bellows or swung his hammer. At every blow he grew stronger and taller, and the sword bent and quivered like a living flame, until, at last, with a joyful cry, he lifted it above his head with both his hands. With a great blow he swung it, and behold! the anvil was split and lay in two parts before him.

The joy in Siegfried's heart grew into the most wonderful peace, and the forge light seemed to grow into full day. The immortal sword was again in the world. But Mimi and the Mist-men were gone. Siegfried went out in the early morning, and the light glittered on the trembling leaves and sifted through in little splashes. He stood still, listening to the stir of the leaves and the hum of the bees and the chirp of the birds. Two birds were singing as they built

a nest, and he wondered what they said to one another. He cut a reed and tried to mock their words, but it was like nothing.

He began to wish that he might speak to someone like himself, and he wondered about his mother; why she had left him. It seemed to him that he was the one lone thing in the world. He lifted his silver horn and blew a sweet blast, but no friend came. Again and again he blew, louder and clearer, until suddenly the leaves stirred to a great rustling, and the very earth seemed to tremble.

He looked, and behold! he had waked the dragon that all men feared; and it was coming towards him breathing fire and smoke. But Siegfried did not know what fear was; he only laughed and leaped over it as it plunged. When it reared to spring upon him, he drove the immortal blade straight into its heart.

Now when Siegfried plucked out his sword he smeared his finger with the blood, and it burned like fire, so that he put it in his mouth to ease the pain. Then, suddenly, the most strange thing happened: he understood all the hum and murmur of the woods; and lo! the bird on the very branch above him was singing of his mother and of him, and of the gold that should be his if he would give up his sword and serve and love no one in the world. She sang, too, of one who slept upon a lonely mountain: a wall of fire burned around that none could pass

but he who knew no fear. Siegfried listened to hear more, but the bird fluttered away before him. He saw it going, and, caring nothing for the gold and the whole world, he followed it.

It led him on and on to a lonely mountain, where he saw light burning. He climbed up and up, and always the light grew brighter. But when he was nearly at the top, and would have bounded on, he could not, for Odin stood there with his spear across the way. The fire glowed and flashed around them, but Siegfried's sword gleamed brighter than anything that ever shone. Siegfried cleft the mighty spear in two with it, and leaped into the flame. And there, at last, in the great shining, Siegfried beheld a mortal like himself.

He stood still in wonder. He saw the light glinting on armour, and he thought: "I have found a knight, a friend!" And he went over and took the helmet from the head. Long ruddy hair like a flame fell down. Then he raised the shield, and behold! in white glistening robes he saw the maid Brunhilde asleep. She was so beautiful! The light glowed into a great shining as he looked, and, hardly knowing, he leaned and kissed her, and she awoke.

Then it seemed to Siegfried that he had found something far better than the hidden Rhine-gold. From that moment he understood the things which used to make him wonder, and he was happy.

Blackie's Model Readers. (Very slightly altered.)

Other stories:—"The Bean, Stick, and Coal"—Grimm. "King Midas and the Golden Touch."

Song—"DREAM OF ANGELS, LITTLE ONE"

—Geo. Cooper, music by Franz Abt, in *Beecham's Portfolio*, Vol. XIX.

Game—IN THE MINE



1. Sing a - bout the big mine, with its chim-neys tall, And its tun - nels dark, with - out a
light at all. We are bu - sy min - ers, with a spade and pick,
Knock - ing with our ham - mers at the coal, click, click! Cling, clang! cling, clang! cling, clang!

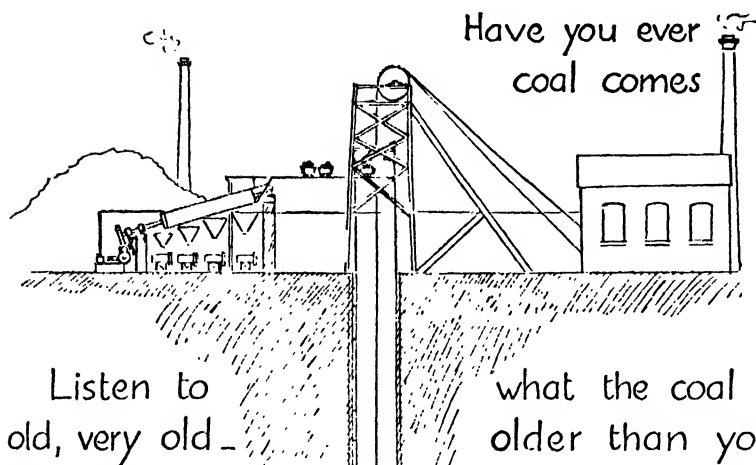
2. Sometimes it is hardest when the coal is low;
We lie on our side and pick away just so.
Then we call the pony-truck and fill it full,
Send it down the rail and tell the horse to pull.
Cling, clang! cling, clang! cling, clang!
3. A signal then is given to the engineman,
Who sends an empty cage as quickly as he can.
The coal is emptied in the cage, then "Right away!"
'Tis carried up, at last into the light of day.
Cling, clang! cling, clang! cling, clang!

Directions.—*Verse 1.* The children are arranged in a ring; they pretend to dig. Some may be sitting, others standing. (If the children are allowed to change their attitudes freely, they will enter into the spirit of the game much better than if they were told just what to do.)

Verse 2. The pony wagon is represented by a boy (the pony), and one or two tiny children (the truck). The miners shovel the coal into the truck, which, when full, moves down the rails (two chalk lines on floor).

Verse 3. At the foot of the shaft, also marked out in chalk, a "man" gives the signal "Right away!" The miners look up as if following with their eyes the cage as it is carried up the shaft.

Blackboard Reading and Drawing



Have you ever
coal comes

thought where
from? Do you
know what a lot
of work must be
done, before we
can have it for
our fires?

Listen to
old, very old -
Yes, older than
Long, long ago,
all the warmth
I could do
have mouths,
and sank into
I was buried



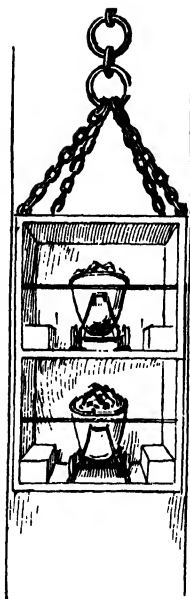
what the coal is saying: "I am
older than your grand-father!
your grand-father's grand-father!
I grew in the forest. I drank in
and brightness of the sunlight,
that; I was a tree, and trees
you know! Then I died,
the earth lower and lower, until
far away from the beautiful sun-
light I loved so much.



There I lay for
many, many years.

At last men dug me out of the mine you see on this
page. How happy I am! Now I can give you boys
and girls some of the heat and brightness the sun gave me.

Can you see the cage which brought me up out of the
mine? Do you see the engine house? What is it for?"



"Try to find the guides that run down the shaft sides. I wonder if you could tell what they are for!

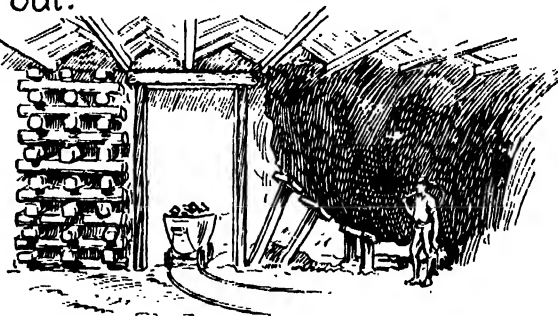
What a strong chain it has to be to carry the cage! This is a double-decked cage. Can you tell what that is?

"The trucks are loaded with coal.

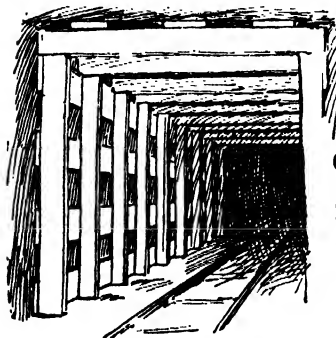
Can you see their wheels? They are there so that the men who work at the pit mouth can run the trucks along easily, and tip the coal out.

"Here is another drawing, which shows how the roof of the gallery is held up.

Do you know what a gallery is?



"Can you see the props holding up the coal? What warm fires that coal will make!



"See this picture now. It shows another way in which the miner makes the sides and roof safe. What a lot of timber they must use down in the mine!

Look at the lines where the truck runs."

(For continuation see next week's lesson.)

The Other Me.



He goes beside me in the Sun;
And he is dark, though I am fair;
Both when I walk and when I run,
The Other Me is always there!

I often tell him Things I know,
But not a word has he to say;
Yet still he goes the Roads I go,
And likes to play the Games I play.

Sometimes the Other Me is tall,
And stretches far, far down the street.
Sometimes the Other Me is small,
And tries to hide beneath my feet!

Last week, the Other Me was lost;
One bad day, when it rained and blew,
He hid when he was wanted most;
But where he went I never knew

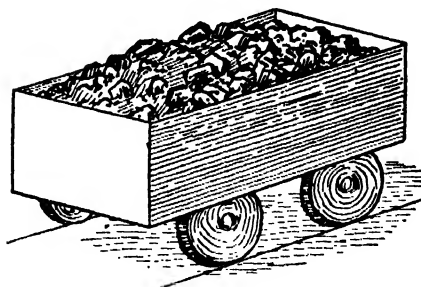
He came back when the Lamp was lit;
I saw him dance across the Floor
And jump into my Bed and sit;
How queer! I never heard the Door!

Hamish Hendry
From "Red Apple and Silver Bells"
by permission.

Other poems suitable for recitation:—1. "Armies in the Fire"—R. L. Stevenson. 2. "Land of Story-books"—R. L. Stevenson. 3. "My Shadow"—R. L. Stevenson, in *Model Poetry Book*, Infant School (Blackie). 4. "The Lamplighter"—R. L. Stevenson, in *Model Poetry Book*, Infant School (Blackie).

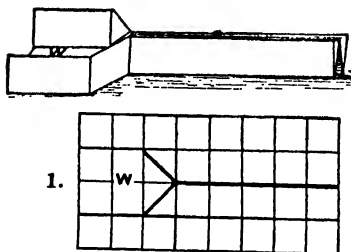
Paper Cutting—MINERS' TOOLS

Clay Modelling—COAL WAGON



Break two pieces off before commencing; one is for bits of coal, the other for the wheels. Make the truck solid by tapping a sphere on modelling board. Work sharp edges by pinching between finger tips and thumb.

Paper Folding—SPADE



Fold as in fig. 2, after having divided the length of paper into eight equal parts. Hold at X with finger and thumb; press down W.

Brush Work—COAL TRUCK



Truck in yellow with brown bands, coal, wheel, and letters, black. Use initials of any railway with which the children are familiar.

Free-arm Drawing—SPADE

Brown-paper Drawing—SAFETY LAMP



Object Lesson—COAL

REQUIREMENTS.—Pieces of coal, coke, coal tar, soft brick.

PREPARATION.—Refer to last week's lesson on coal. The children heard how hard the miner had to work, and they saw the dangers he had to undergo for the sake of coal. Why is this coal so precious?

PRESENTATION.—(a) **Uses of Coal.**—(i) *For Making Fires.*—Not only domestic fires but huge engine-boiler fires are kept alive with coal. The engine driver on the railway train could not make the engine go if his fireman had no coal with which to feed the boiler fire.

Machinery in workshops and factories is chiefly driven by steam. This is made in the boiler house, where the huge roaring fires have to be fed constantly with coal.

The great steamships use so much coal in the fires which heat their boilers that they have to load tons upon tons of coal before they set out on a journey. (Picture the plight of a steamship with the coal supply used up in mid-ocean.)

Some industries (e.g. iron) need huge furnaces in which the ore is melted. (Picture the hot furnaces to the children, and tell that the heat is so great that hard iron is melted until it flows like a liquid.)

The schoolroom is heated by means of pipes filled with steam, which is made in the boiler house. Even the working of the mine itself, the drawing up and letting down of the buckets and cages, &c., is worked by steam heated by precious coal.

(ii) *For the Preparation of Coal Gas.*—Houses used to be lighted with candles and lamps until people discovered that they could make a gas from coal which, when burning,

would give a light. Now nearly every home is lit by means of burning coal gas. What other kind of light is there? Where does the gas with which the home is lighted come from? How does it get to the gasworks? Large quantities of coal are heated, and a gas is given off which is collected and stored in a gasometer. What is a gasometer? (Make blackboard drawing.)

When the coal has been heated like this, it turns into coke. (Show pieces and ask uses.)

When coal is heated during the preparation of coal gas a sticky stuff comes from it. This is coal tar. (Show a piece.) The children may have noticed that sometimes when coal is put on the fire a little stream of tar runs down the side of a piece; this is coal tar. Of what use is coal tar? (Refer to repairing of streets and roads.) How is the tar used?

(b) **Properties of Coal.**—Black, more or less shiny, and brittle. It breaks very easily along certain ways. (Contrast with soft brick.) This is because it has been formed in layers. When coal is burned it burns with a good deal of flame and some smoke. Good coal burns quite away with the exception of a brown, grey, or white ash.

ASSOCIATION.—If possible, take the children to a gasworks, and connect the lesson with the visit. Refer to lesson on railway train when speaking of uses of coal.

FORMULATION.—Coal is useful for making fires in the home. It is used in making steam for the driving of engines. Gas and coal tar are made from coal.

APPLICATION.—See correlated lessons.

Phonetics

PART I.-*Breathing Exercise with Arms Circling and Heels Raising.*

PART II.—“Ore” in “ore”.

(i) Starting position as in last week's breathing exercise. The command given is: “Arms circling with heels raising—One! two!” (For instructions as to arms circling see 4th week, Autumn, Phonetics.) The heels are raised at the same time as the arms are raised forward and upward, and sunk when the arms are lowered from shoulder height to the sides. Breath is taken in at “one!” and expelled at “two!”

(ii) Teacher introduces the word “ore” in a little chat about mines in general. All mines are not coal mines. Children name a few other mines. When they suggest iron mines the teacher fastens upon that, and tells children that although coal is used in the condition it comes from the mine, iron is not. Before it is melted it is all mixed

with dirt and earth. It is called ore. Teacher shows a piece of iron ore. After the previous lessons on “are” and “ire”, children will have no difficulty when the symbol “ore” is introduced. They build “core”, “store”, “snore”, “shore”, &c., from it. As each word is built, children tell its meaning.

Blackboard reading: Before a mine can be made men *bore* a hole in the ground. They dig down, down, down into the earth's storehouse. What do they want? More things than I can tell you of to-day. Some mines are for iron ore. Do you know what that is? Some are for coal. A score of miners went in the mine by the shore. They wore pit clothes. One miner tore his hand. It was very sore.

Number

Number 24.

(i) Addition of numbers with sum not more than 24, e.g.:

“12 picks, 3 hammers, 5 spades, and 4 crowbars. How many miners' tools?”

(ii) Subtraction of numbers with subtrahend 24 and minuend not greater than 13, e.g.:

“24 coal wagons were standing on the rails. The colliers had filled 13 of them. How many yet to fill?”

(iii) Exercises involving addition and subtraction, e.g.:

“2 dozen colliers were waiting at the pit mouth to go down in the cage. 3 went down first, 4 next, and 5 next. How many yet to go?”

(iv) Multiplication and division

$$(a) 24 \div 1 = 24 \therefore 24 \times 1 = 24$$

$$(b) 24 \div 2 = 12 \therefore 12 \times 2 = 24$$

$$(c) 24 \div 3 = 8 \therefore 8 \times 3 = 24$$

$$(d) 24 \div 4 = 6 \therefore 6 \times 4 = 24$$

$$(e) 24 \div 6 = 4 \therefore 4 \times 6 = 24$$

$$(f) 24 \div 8 = 3 \therefore 3 \times 8 = 24$$

(a) “24 miners have 1 Davy lamp each. How many Davy lamps? Sometimes they get thirsty in the mine. How many glasses of water would 24 men require if they wanted a glass each?”

(b) “There are 12 pit ponies in a coal mine. They are so used to the dark that if they were brought out of the mine they

could not see. How many eyes altogether? If they work for 24 pit boys, how many boys to each pony?"

(c) "3 spadefuls will fill one truck of coal. How many trucks will 24 spadefuls fill?"

(d) "If 4 miners go up the shaft in the cage at once, how often will the cage have to come down for 24 miners? A pit boy

gets 4s. per week. How much will he get in 6 weeks?"

(e) "4 wheels to one coal wagon. How many wheels have 6 wagons? 24 men picking at coal; one-sixth of them on their backs. How many?"

(f) "3 passages in one part of the mine. 8 miners in each passage. How many miners?"

Story—CHILDE CHARITY

Once upon a time there lived in the west country a little girl who had neither father nor mother; they died when she was very young, leaving her to the care of her uncle, the richest farmer in all that country. He had houses and lands, flocks and herds, many servants, a wife who brought him a large dowry, and two fair daughters. All their poor neighbours looked up to the wealthy family, so that they imagined themselves very great people indeed. The father and mother were as proud as they could be, the daughters believed themselves to be the greatest beauties in the world, and not one of them would speak civilly to anybody they thought beneath them.

Now, although she was their near relation, they looked down upon the orphan girl, partly because she was penniless, and partly because of her humble, kindly disposition. Now the more needy and despised any creature was, the more ready was she to befriend it, so that the west-country people called her Childe Charity. If she had another name, I never heard it. Childe Charity was considered of no account in that proud household. Her uncle would not own her for his niece, her cousins refused to play with her, and her aunt sent her to work in the dairy, and to sleep in the back garret, where only lumber was kept, with dry herbs for winter use.

The servants followed the example of their betters, and among them Childe Charity had more work than rest or play. All day she scoured pails, scrubbed dishes, and washed crockery ware; but every night she slept in the back garret as soundly as a princess could in her palace chamber. Her uncle's house was large and white, and stood among green meadows by a river's side. In front it had a porch covered with a vine; behind were high granaries and a farmyard. Within, there were two parlours for the rich, and two kitchens for the poor, which the neighbours thought extremely grand.

One day, in the harvest season, when the corn was all cut and housed, the rich farmer invited his neighbours to a harvest supper. The west-country people came in their holiday clothes and best behaviour. Such heaps of apples, such piles of cakes and wedges of cheese had never been seen at a feast before; and the guests were making merry in kitchen and parlour when a poor old woman came to the back door begging for scraps of food and a night's lodging. Her clothes were coarse and ragged, her hair was scant and grey, her back was bent, her teeth were gone. She had a squinting eye, a clubfoot, and crooked fingers. In short, she was the poorest and ugliest old woman that ever came a-begging.

The first who saw her was the kitchen

maid, who ordered her to be gone for a wicked witch. The next was the herd boy, and he threw her a bone over his shoulder. But Childe Charity, hearing the noise, came out from her seat at the foot of the lowest table and asked the old woman to take her share of the supper and sleep that night in her bed in the back garret. The old woman came in and seated herself without a word of thanks, and the company laughed at Childe Charity for giving up her bed and supper to a beggar; but Childe Charity did not mind them. She scraped the pots for her supper that night, and slept on a sack among the lumber; and next morning, before she awoke, the old woman was up and away, without so much as saying thank you or goodbye!

That day the servants were sick after the feast, and very cross; so you may guess how civil they were when, at supper-time, who should come to the back door but the old woman, again asking for scraps of food and a night's lodging. No one would listen to her, or give her a morsel, until, as before, Childe Charity rose from her seat at the lowest table, and asked her to take her supper and sleep in her bed in the back garret. Again the old woman came in and seated herself without a word; again Childe Charity scraped the pots for her supper and slept on the sack. As before, in the morning the old woman was gone; but for six nights after, as soon as the supper was spread, there she was at the back door, and as regularly the kind-hearted little girl invited her to come in.

At last, on the ninth night from her first coming, when Childe Charity was getting used to scraping the pots and sleeping on the sack, the old woman's well-known knock came to the door. When Childe Charity opened it, there she stood, with a shaggy, aily-coloured dog beside her—a dog so clumsy and stupid-looking that no farmer's

boy would have cared to possess him. "Good evening, my little girl!" she said. "I shall not need your supper and bed to-night, because I am going on a long journey to see a friend. But here is a dog of mine, that nobody in all the west country will take care of for me. He is somewhat short-tempered certainly, and not very handsome, so perhaps that is the reason. I will leave him in your charge, however, until the shortest day in all the year. Then you may expect me back, and you and I will settle accounts for his keep."

When the old woman had said the last word she set off with such speed that Childe Charity lost sight of her directly; and the ugly dog began to fawn upon her, though he snarled at everyone else. The servants said he was a disgrace to the house, the proud cousins wanted him drowned; and it was with much trouble that Childe Charity at last got leave to keep him in a tumble-down cowshed. The little girl gave the dog part of all her meals, because, ugly and cross as he was, he seemed fond of her, and the old woman had left him to her care. And when the hard frost came she took him secretly to her own back garret, for the cowshed was damp and cold in winter.

Night after night the dog lay on some straw in a corner, and Childe Charity slept soundly on her hard bed. But every morning the servants would say to her: "What bright light and fine talking was that we heard in your back garret last night?" "There was no light but the moon shining in through the window, and no talk that I heard," Childe Charity replied; and she really thought they must have been dreaming. But still, when any of them awoke in the dark and silent hour that comes before the dawn, they saw a light brighter and clearer than the Christmas fire, and heard voices like those of lords and ladies in the back garret.

Partly from fear and partly from laziness, none of the servants would rise to see what might be there, until at length, when the winter nights were at their longest, the parlour maid crept out of bed, when all the others were asleep, and set herself to watch at a chink in the door. She saw the dog lying quietly in a corner, Childe Charity sleeping soundly in her bed, and the moon shining softly through the shutterless window. But an hour before daybreak there came a flare of lights and a sound of far-off bugles. Then the window opened, and in marched a troop of little men clothed in crimson and gold, every man bearing a torch, so that the dingy room seemed as bright as day.

The little men marched respectfully towards the dog, where he lay on the straw, and the most richly dressed among them said humbly: "Royal Prince, we have prepared the banquet hall. What will Your Royal Highness please that we do next?" "You have done well," answered the dog. "Now make ready the feast, and see that all things be in the best array, for the Princess and I intend to bring home a stranger who has never yet feasted in our halls." "The commands of Your Highness shall be obeyed," said the little man, making a low bow; and he and his company passed out of the window. By and by there was another flare of lights and a sound of flutes far off. The window opened again, and there came in a company of little ladies robed in rose-coloured velvet, each carrying a crystal lamp.

They also walked respectfully towards the dog, and the fairest among them said in a sweet soft voice: "Royal Prince, we have prepared the tapestry. What will Your Highness please that we shall do next?" "You have done well," again replied the dog. "Now prepare the robes, and let all things be in the best array, for the Princess

and I shall bring with us a stranger who has never yet feasted in our halls." "The commands of Your Highness shall be obeyed," said the little lady, making a low curtsy; and she and her company passed out through the window, which closed noiselessly behind them. Then the dog stretched himself out on the straw, the little girl turned in her sleep, and the moon shone in on the back garret.

The parlour maid was so much amazed, and so eager to tell this strange story to her mistress, that she could scarcely close her eyes again that night, and was up before cock crow. But when she told it, her mistress called her a silly girl for having such foolish dreams, and scolded her so that she dared not mention what she had seen to the other servants.

However, Childe Charity's aunt thought there might be something in the tale after all; so next night, when the household was asleep, she crept out of bed and set herself to watch at the back-garret door. She saw exactly what the maid had told her; the little men with the torches, and the little ladies with the crystal lamps came in and made low reverence to the dog; she heard the same words pass, only this time the dog said to the little men: "Now prepare the presents," and to the little ladies: "Prepare the jewels".

When they were gone the dog stretched himself on the straw, Childe Charity turned in her sleep, and the moon shone in on the back garret.

The mistress was as eager to tell the story as the maid had been. She woke up Childe Charity's uncle before it was dawn; but he laughed at her and called her a foolish woman. That night, however, the master thought he would like to see for himself; so he set himself to watch at the chink in the door.

The same thing nappened again that the

maid and the mistress saw; but this time the dog said to them all: "To-morrow, come and meet me and the Princess with horses and chariots; for we shall bring a stranger from this house who has never travelled with us yet nor feasted in our halls." The little men and the little ladies made answer, "The commands of Your Highness shall be obeyed".

Then when they had gone out through the window the ugly dog stretched himself out on the straw, Childe Charity turned in her sleep, and the moon shone in on the back garret.

The master was as much excited as the maid and the mistress had been. He remembered having heard his grandfather say that somewhere near his meadows there lay a path to the fairies' country, and the hay-makers used to see it shining through the grey summer mornings as the fairy bands went home.

Nobody had heard or seen the like for many years, but he concluded that the doings in the back garret must be the work of fairies, and that the ugly dog was really a personage of some importance. His chief wonder was, however, what visitor the fairies intended to take from his house; and after thinking the matter over he was sure it must be one of his daughters-- they were so handsome and had such fine clothes.

In the morning he bade his daughters dress themselves in their best clothes; he was sure it must be one of them the fairies intended to take from his house. The proud cousins put on their richest silks and rarest laces and strutted like peacocks all day, while the sweet, unselfish little girl scrubbed and scoured away in the dairy.

As the family were sitting down to supper the ugly dog began to bark, and a knock was heard at the back door. Childe Charity made haste to open it. There was the old beggar woman once more. Childe Charity

was about to offer her supper and her bed as before, when the old woman said, "This is the shortest day in all the year, and I am going to hold a feast after my travels. I see that you have taken good care of my dog, and now if you will come to my house he and I will do our best to take care of you."

As the old woman spoke, there was a sound of far-off flutes and bugles, then a flare of bright light; and soon a great company, clad so grandly that they shone with gold and jewels, came driving along in open chariots covered with gilding, and drawn by snow-white horses.

The proud cousins in all their finery had come to the door by this time, but nobody wanted them. To their astonishment and sorrow no one in that great and splendid company seemed aware of their presence; all were watching the poor despised cousin with whom they had thought themselves too fine to play.

The old woman took Childe Charity by the hand and led her to the first and finest of the gilded chariots. It was empty, and had clearly been kept for the old woman and Childe Charity. When they were seated, the ugly dog jumped in after them. No sooner were the old woman and her dog within the chariot than a wonderful change passed over them. The old woman turned instantly into a beautiful princess, with rosy cheeks and long yellow curls, while the ugly dog at her feet started up into a handsome young prince, with nut-brown hair and blue eyes, and wearing a royal robe of purple and ermine.

"We are a prince and princess of fairy-land," said they, as the gilded chariots drove away, and the little girl sat astonished in her corner. "A question rose between us as to whether or not there were still kindly and unselfish people to be found in these false and greedy times. One said 'Yes',

and the other 'No'. I was wrong," said the Prince, "and I am glad, although as a forfeit I shall have to pay for the presents and the cost of the feast."

So Childe Charity went with that noble company into a country such as she had never seen before, where primroses and violets covered all the ground, and the light

was always like that of a summer evening before the sun goes down.

Some of the farmer's household, who were looking after them through the moonlight, said the chariots had gone one way across the meadow, while some said they had gone another; but to this day they cannot agree upon the exact direction.

—Frances Browne, in *Blackie's Model Readers* (slightly abridged).

Other suitable story:—"Cinderella".

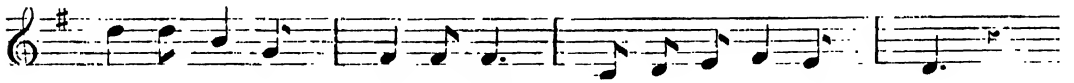
Song—HUSH-A-BYE (Cradle Song)

—Words by Edw. Oxenford; music by A. G. Colborn, in *Beecham's Portfolio*, Vol. XIX. Adapt words to suit the winter season.

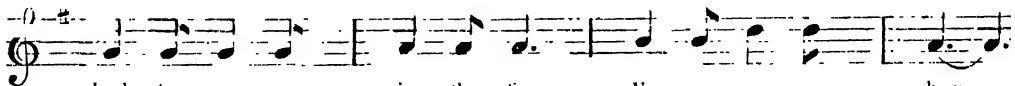
Game—PICTURES IN THE FIRE



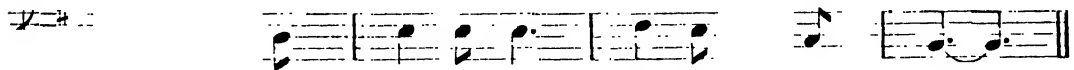
1. Close the door, and bring your chairs; Put play-thi



Poke the fire and make it bright; the close of



Look for in the fire. Ve - ry qu keep.



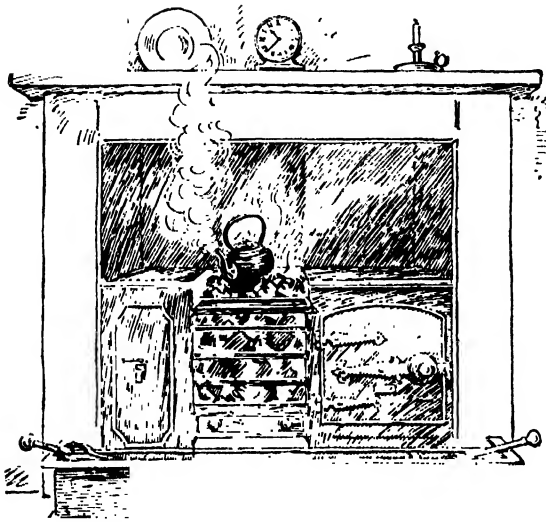
Bo - peep Look - ing for her sheep.

2. See Jack Horner, with his thumb
Poking in his pie;
And old Mother Goose is here,
Flying in the sky.
There is Tom, the piper's son,
Running with his pig;
These are Giant Killer Jack
And the Giant big.

3. There is Little Goldilocks,
And the Three Brown Bears.
Ah! 't will soon be time for bed,
Time to go upstairs.
It is jolly sitting here,
In the firelight red;
But it's eight o'clock, oh dear!
So 't is time for bed.

Directions.—This may be taken as an action song. Before the game choose certain children to represent the different characters. As each one is mentioned, he or she walks in front of class (or round the ring), acting his or her part. The class children imitate the characters as far as possible, but they remain in their places.

Blackboard Reading and Drawing



One winter night, Edward and his father were sitting by the cosy fire side. The wild wind was howling and roaring. They could hear him on the roof rattling the slates.

Edward's father said, "But let him rage round. He does us no harm. We build up the fire. We're

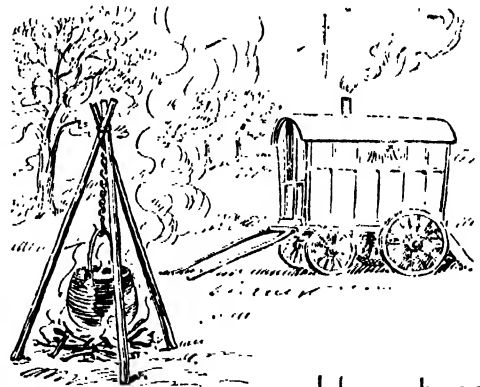
snug and warm. I wonder what we should do if we had no coal!"

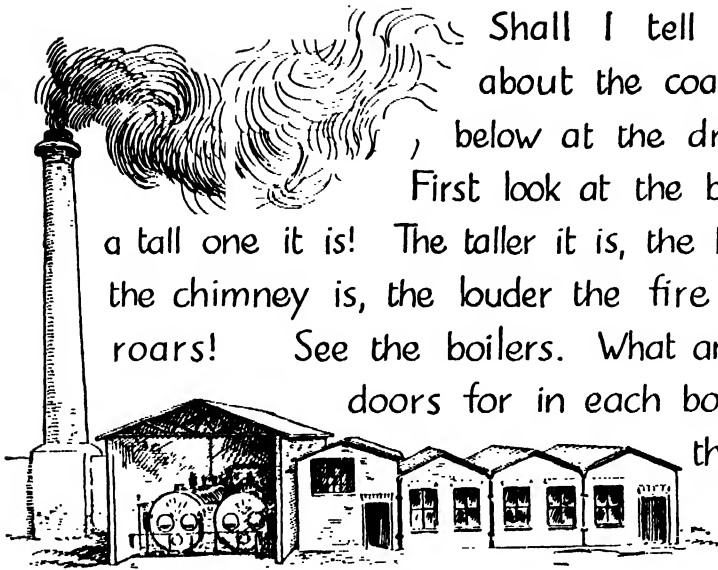
The people who live in this van move about from place to place. They have no coal. See what they are using instead.

Coal is useful for turning water into steam. See the drawing at the top of the page.

Steam is very strong. If it

could not get out of the kettle, it would burst the strong iron sides. Steam drives ships across the seas; it sends the trains whizzing along; and it makes the machines in the workshop work away merrily.





Shall I tell you some more about the coal mine? Well, look below at the drawing of the works.

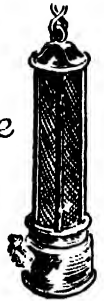
First look at the big chimney. What a tall one it is! The taller it is, the better! The higher the chimney is, the louder the fire under the boilers roars! See the boilers. What are these two round doors for in each boiler? How busy

the fireman must be!

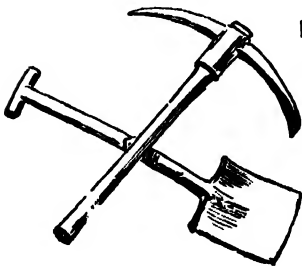
He has to keep the boiler fires burning day and night. Next to the boiler-house is the engine-house. Next to that are the works.

It is very, very dark inside the mine. The sun never gets inside there. So the miners have to take a light with them. They cannot use a lamp like those we use; neither must they use gas.

If they did, the mine might be blown up. They use a safety lamp. Here is one. A man named Davy found out how to make a lamp which is quite safe to use in the



mine. When you are older you will learn how that can be.



These are two of the miner's tools. He works with his pick and then throws the coal into trucks with his shovel.

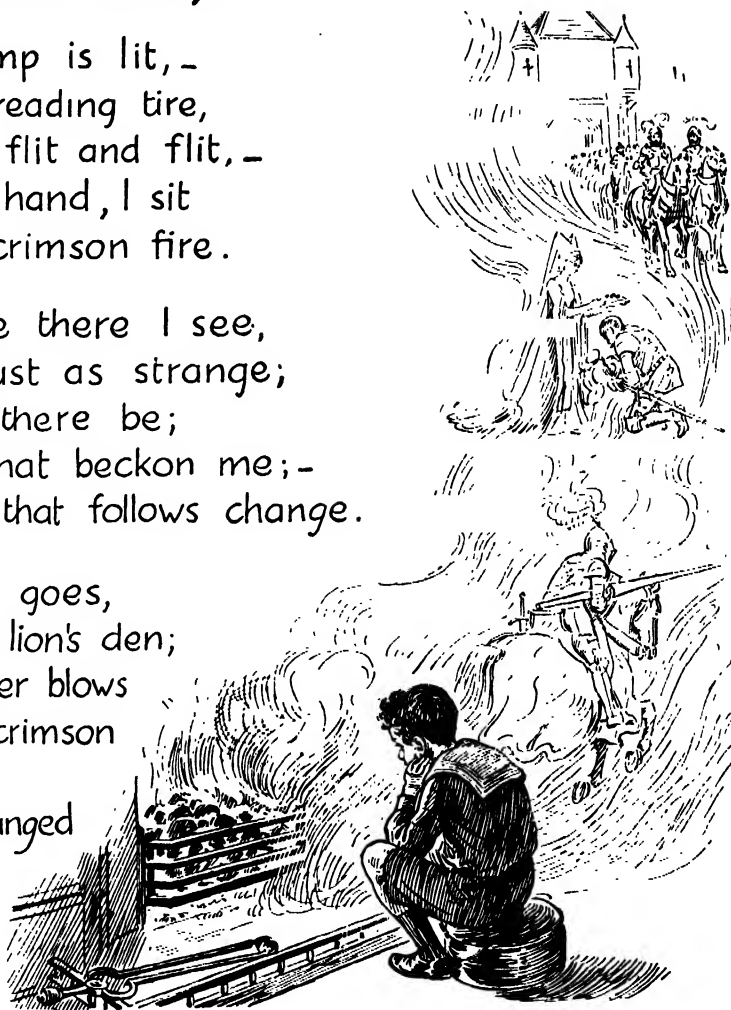
The Crimson Country.

Ere yet the lamp is lit, -
 When I of reading tire,
 When shadows flit and flit, -
 With head on hand, I sit
 Before the crimson fire.

Strange people there I see,
 In places just as strange;
 Bright palaces there be;
 Red Knights that beckon me; -
 With change that follows change.

A fiery castle goes,
 And leaves a lion's den;
 A flaming banner blows
 Where grew a crimson
 rose; -
 Then all is changed
 again.

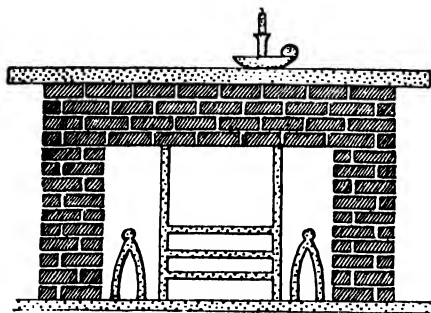
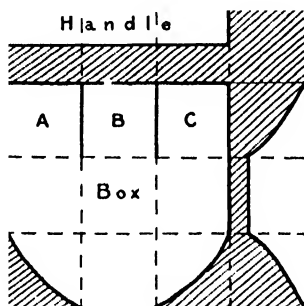
With head on hand, I sit Before the magic fire;
 Deep in the midst of it, I see the fair things flit, -
 The things of heart's desire.



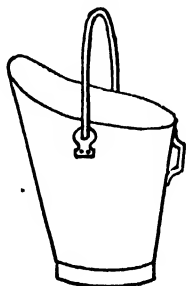
Hamish Hendry

- From "Red Apple and Silver Bells"
 by permission.

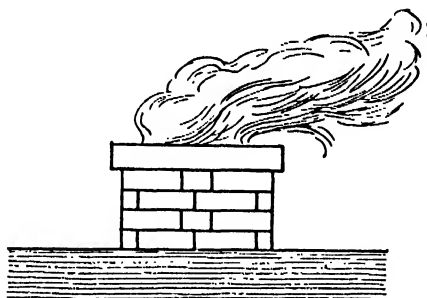
Other poems suitable for recitation:—1. "Winter"—*The Window*, by Tennyson. 2. "George and the Chimney-sweep"—Ann and Jane Taylor, in *Model Poetry Books*, Infant School (Blackie). 3. "Picture Books in Winter"—R. L. Stevenson.

Paper Cutting—A WARM FIRESIDE**Paper Folding--COAL SCUTTLE**

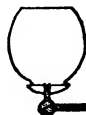
Cut out in cardboard. Fasten A, B, and C together. Affix handle and put on stand.

Free-arm Drawing—COAL BOX**Clay Modelling—BUCKET OF COAL**

Steps:—Break off small piece of clay for coal and handle; make sphere, oval; tap ends; pinch out edges with fingers and thumb; put on handle, which must be previously rolled with finger tips; stick on top bits of coal.

Brush Work—CHIMNEY

Roof, grey; chimney, brown madder; chimney top and brick markings, Vandyke brown; smoke, grey or brown.

Brown-paper Drawing--GAS BRACKET

From *Vinall's Drawing Course* (Blackie). Colours as desired.

Object Lesson—THE RABBIT

REQUIREMENTS.—A live pet rabbit. (For purposes of the lesson, this may be kept on a table under a waste-paper basket.) Food for the rabbit; model of squirrel for comparison; drawings of rabbit's mouth; roof of mouth; side patch of hairs inside cheek; teeth and eye.

PREPARATION.—Winter is the time when children appreciate their homes the most. Their games have mostly to be indoors, and their pleasures generally connected with the home. At this season the home pets need greater attention; and perhaps because of this they become better known, and dearer to the children. (Encourage children to talk freely about their many pets: cats, dogs, canaries, parrots, rabbits, doves, and the rest.)

Why do the children love these pets? Because they will let themselves be petted and played with. How is this? Because they are tame. Long living with people who are kind and thoughtful has taught them they have no cause to fear. (Draw a contrast between tame and wild animals.) In autumn the children heard about a little wild animal of the woods—the squirrel. Now they are to have lessons on another animal which is naturally wild—the rabbit. The squirrel and the rabbit are very much alike in some respects; but not in this, that the latter has become tame in many cases and is great friends with the children.

PRESENTATION. — (a) **Description.** — (i) **Covering.** — Covered with fur. (Compare with squirrel.) What is fur? It is more than soft warm hair. The children will remember that they found the sheep's coat was of soft hair and yet it is called wool. If they examine the rabbit's fur carefully, they will find that it consists of many fine delicate hairs which are crowded together.

They stand straight up from the skin and are not curly. The coats of dogs, horses, and cows are not called fur, because the hairs of which they are made either curl or lie flat.

The rabbit's fur varies in colour according to the kind of life the animal lives. Tame rabbits may be black, grey, white, or brown; but wild rabbits are nearly always a sort of sandy grey. Why should this be so? The wild rabbit has many enemies; it is best therefore that it should be as inconspicuous as possible. Its coat very nearly resembles in colour the sandy places where the animal lives. It matters little what colour a tame rabbit is, for it has few enemies, and it is protected in the hutch from even these. A white or black rabbit could easily be seen by a stoat or eagle, and when it was some distance from the warren these enemies would pounce on it.

The rabbit's fur is a valuable covering for the animal. (See later, in lesson under Habits.)

(ii) *The Tail.*—Very short, with white underneath. (Contrast with squirrel's fine long tail.) It is thought that the whiteness on the under side serves as a danger signal to other rabbits which are behind. If children have seen a number of rabbits hurry off to their holes, they will remember how funny the little white tails looked as they bobbed up and down. There is no doubt that the mother's white tail enables the young rabbits to find her.

(iii) *Legs.*—Front legs short; hind legs longer and more powerful. (Compare with squirrel. Remind children, too, about the frog's legs.) Just as in the case of these animals the hind legs are adapted for leaping. Why should the rabbit be able to leap well? It has so many enemies. The rabbit,

however, cannot walk well owing to this difference in the length of its legs.

Besides showing their white tails, rabbits have another warning signal: they drum the ground with their hind legs.

The rabbit has claws on its feet. These, however, are not so sharp as those of the squirrel; why? (Compare the four toes and small toe on each fore foot of the squirrel.) The hind feet have four toes.

(iv) *Ears*.—Very long; can be moved to gather sounds from different directions. Sometimes the rabbit will stand on its hind legs and move its ears backwards and forwards listening intently to even the most distant sound of danger. (Here, again, remind the children that, as the rabbit has so many enemies, it is necessary that the animal be keen of sight and hearing.)

(v) *Eyes*.—Prominent. They are set at the sides of the head, so that the rabbit can see behind it without turning its head. The rabbit has three eyelids: two like ours and one which corresponds to the fleshy inner corner of our eyes. It is with this third lid that the animal winks. (Let the children see for themselves.)

(vi) *Teeth*.—Sharp cutting or biting teeth in front. At first the children might think that the rabbit had only two teeth in the front of the upper jaw; but if they could see behind these two they would see two others close to them. There are two lower front teeth. These front teeth are long and curved. Their edges are sharp like a chisel. The children will learn later in the lesson why this is necessary.

At the back of the jaw are the grinding teeth. (Compare with squirrel, and draw on blackboard.)

(b) *Habits*.—(i) *Lives Underground when Wild*.—It does so to hide from its enemies. Rabbits make a sort of underground village, called a rabbit warren. The warren has many passages; some of them lead up to

the mouths of the burrows, and others lead to snug little nests where the mother rabbits take care of their young. The rabbits make more than one exit, because they know they would be in a sad plight if a stoat or some other enemy came by the only passage in search of prey. The numerous passages mislead the enemy, who loses his way in the dark, while the rabbit probably leaves by means of one of the many exits. The rabbit finds its way in the dark by feeling the sides of the passages with its long sensitive whiskers. (Describe how the rabbit works away when burrowing. It scratches and pushes the sandy earth out with its hind feet.)

(ii) *The Mother Rabbit cares for her Young*.—She makes a nest for them of leaves and grass; then, as if this were not enough, she tears some of the fur from her own breast and uses that too.

(iii) *Likes to be Clean*.—The fur covering not only keeps the rabbit warm, but it helps to keep it clean and dry. (Show how necessary it is to have a coat that will clean easily when the rabbit has often to live in muddy and wet places in winter.) The rabbit often cleans its fur.

(iv) *Rabbits are Gnawing Animals*.—Those boys who keep pet rabbits will have noticed that the bars of the hutch get nibbled away. Wild rabbits gnaw fences and tree trunks to such an extent that they become a pest to the farmer or person who tries to cultivate tree plantations. The rabbit's teeth are sharp in front, and no matter how hard they have to work they never get worn away. This is because the teeth never cease growing! (Contrast with children's own teeth, which, if broken or decayed, never grow again.) This is very well indeed until the rabbit loses a tooth. Then the corresponding tooth has nothing to meet it and keep it worn down. It grows longer and longer, and in time all the other teeth be-

come displaced, and the poor rabbit cannot chew its food.

The rabbit's mouth is specially constructed because of this habit. The upper lip is split and can be drawn out of the way of splinters easily; the teeth are sharp; the top of the mouth is rough; and the inside of the cheek is supplied with a patch of hair. (Show that but for these adaptations the rabbit's teeth would wear away, its lip would get hurt and become painful, the roof

of the mouth would become sore, and the inside of the cheek get full of splinters.)

ASSOCIATION.—Compare with the squirrel the following: The rabbit's fur; its useful colour as a means of protection; front gnawing, back grinding teeth; nest hidden out of sight—in case of squirrel, high in a tree; in the rabbit, underground.

FORMULATION.—A general summary.

APPLICATION.—See correlated lessons.

Phonetics

PART I.—*Breathing Exercise with Arms Raising Sideways and Knees Bending.*

PART II.—“ure” in “cure”

(i) Starting position: Arms to sides, heels together, toes turned out at right angles, chest well thrown forward.

The command is: “Arms raising sideways, with Heels raising and Knees bending—One! two! three! four!” At “one!” the arms are raised slowly to shoulder height, hands turned downwards. At the same time heels are raised and breath is taken in. At “two!” the knees are turned well out and bent slowly to a right angle. The body is held erect, arms fall slowly to sides, and breath is expelled. At “three!” the knees are stretched out, heels still raised. Arms are again lifted to shoulder height, and breath again taken in. At “four!” heels sink to the ground, arms fall to sides, and breath is expelled.

(ii) Teacher introduces the “ure” sound by reference to the terminal “e”, and its effect on the preceding vowel. She asks

children to print “ure” on their boards. What must be added to make it into “cure”? Teacher tells a story which introduces words containing “ure”. At each of these words a pause is made for children to build the word on the word-building frame or on their boards. The story might be about a child with a cough: “If she takes medicine it is *sure* to go. She must *endure* lying in bed, &c.” The children draw medicine bottle or anything they choose which suggests a cure, and print “*cure*” underneath.

Blackboard reading: Farmer Smith does not like rabbits. “I cannot *endure* them,” he says. “They spoil my corn. I will *cure* them of it,” and he laid a trap to catch them. He *secured* it to the ground and pulled hard to make *sure* it was fast. “*Surely* that is right,” he says. Ted Smith has a pet rabbit. It is *pure* white

Number

Number 24 continued.

(i) There are 24 things in 2 dozen, because 12 things = 1 dozen.

(ii) There are 24 pence in 2 shillings, because 12 pence = 1 shilling.

(iii) There are 24 farthings in 6 pence, because 4 farthings = 1 penny.

(iv) There are 24 halfpence in 1 shilling, because 12 halfpence = 6 pence.

(v) There are 24 hours in 1 day.

Specimen questions:

(i) "Ted's rabbit hutch has a dozen bars in front. Tom Jones has a hutch too. It has a dozen bars. How many bars in both hutches?"

(ii) "How many pence in 1s.? How many in 2s.? How many penny eggs for 2s.? Ted saved his 'Saturday penny' for a rabbit hutch. It cost him 2s. How many weeks had he to save?"

(iii) "Ted asked the greengrocer the price of a carrot. 'One farthing,' said the shopman. Ted paid 1 penny. How many carrots did Bunny get? How many could Ted have got for 6d.? How many farthings in 6d.?"

(iv) "Sarah Jones saw a white rabbit in a shop window. The shopman wants 1s. for it. Sarah is saving up to buy it, but she

only gets $\frac{1}{2}d.$ a week from her mother. How many weeks will she have to save?"

(v) "From 7 in the morning till 7 at night. How many hours? From 7 at night till 7 in the morning. How many hours? From 7 in the morning till 7 the next morning. How many hours? How many hours in 1 day and night?"

Specimen general questions on numbers to 24:

(i) If a rabbit has 4 toes on each hind foot, and 5 on each fore foot, how many toes has a rabbit altogether?

(ii) Mr. and Mrs. Bunny had 4 baby Bunnies. How many in the Bunny family? How many in 4 such families? How many feet in the Bunny family? How many eyes? ears? tails?

Story—LAP AND TROT

There was once a mother rabbit who had two little rabbit children. The older one was called Lap and the other Trot. Lap was a dear little rabbit, not only pretty but good, and always in a sweet temper. But Trot had two great faults: he would never do as his mother wished, and he was very greedy.

One morning Mother Rabbit saw that her cupboard was empty; so she said to Lap: "My little Lap, I must go out to get something for dinner. I will come back as soon as I can and take you for a nice walk. Be good children, and do not go too far from the door while I am away."

When their mother was gone the two little rabbits played about for a time near the door. By and by Trot began to go farther away. "Where are you going, Trot?" said his brother. "Come back; you know we are not to go away alone." "We won't go far," said Trot. "But just out there is a nice place to play 'Touch'.

Come along; we need not go far." "Well, I'll come, then; but we must not go far from home," said Lap.

Both little rabbits went and played "Touch", and liked their game so well that they did not notice how, bit by bit, they were going farther from home. Lap stopped all at once, because he found himself in a place he did not know. They were near the steps of a house they had never seen before. "Where are we, Trot?" he asked in a fright. "We must go back. What will Mother say if she does not find us when she comes home?" "Oh, we shall be at home long before she is! Don't you see where our door is? It isn't far. We shall still have time to play. Oh, what fine lettuce!" There was, indeed, near the steps, a basket of lettuce. The woman who owned it had left it there while she went into the house to sell some to the cook.

Trot began to eat the lettuce as fast as he could. "What are you doing, Trot?"

cried his brother. "If Mother should see you she would say you were stealing." "Mother never brings us such good lettuce as this," said greedy Trot, starting on a fresh one. Just as he said this, a sharp kick sent him rolling over towards his brother, while an angry voice called out: "You wicked rabbit! You thief of a rabbit! You are only good enough to be made into stew!" The woman who owned the basket had come into the house, and had seen Trot eating her lettuce. Of course she did not like that at all.

Away the two rabbits ran as fast as they could. Trot was not much hurt, but he had had a great fright. As they ran, they could hear the woman shouting again and again: "You wicked rabbit! You thief of a rabbit! Good only to be made into stew!"

By and by they came to a wide green field. Their legs were tired with running so fast and so far, and they had hardly any breath left. Lap stopped first. "Where is our house now?" he cried, shaking with fear. "I think it must be near that tree," said Trot. "We shall soon be there, so let us rest a little, till I have lost the pain of that kick. The field is very pretty." "Yes, it is," said Lap. "What strange plants these are; we do not know them at all!" "You—you do not know them, but I know them very well," said Trot. "Look! there is some lovely parsley. I never saw any so large before. Taste a little, Lap." "I do not want to," replied Lap. "I am not sure that it is parsley, and it is wrong to eat without Mother's leave;" and Lap shook his long ears in sorrow. "I think we had better go home," he added. "All right!" said Trot. "Let us go home, for I cannot eat any more. What a pity! That parsley is so good!

They had hardly got home when Lap, standing in the doorway, saw Mother Rabbit coming. "There is Mother!" he cried.

"Are you going to meet her, Trot?" "I am tired. I want to rest," said Trot, in a weak voice. "Oh, how ill you look! Do you feel ill, poor thing?" "Why, no, indeed. A rabbit can be tired without being ill, can't he? Don't say to Mother that I am ill." Lap said nothing, but went to meet his mother; while Trot rolled himself up in a corner. Lap helped Mother Rabbit to unpack her basket, and soon she had a nice dinner ready for her children. Lap liked it very much, and soon ate his plateful. Trot tried to eat too, but he did not get on very well. He began to feel sick. His head was very hot, and he was in pain all over.

At last he could bear it no longer, so he threw himself on the ground, and rolled about, crying with pain. "What is the matter, my dear little Trot?" said the good Mother Rabbit, running to him. "Oh, dear, dear!" moaned Trot. "I have a pain here—and here! It is like a wild animal biting me. Oh! oh! oh!" "What have you done while I have been away? Have you eaten anything? Lap, tell me what is the matter?" Poor Lap went pale. Then he said: "We went into a field and ate some parsley." But Trot gasped out: "Not Lap, Mother, *he* did not have any; but *I* did. Oh, what a pain I have! Do help me! do!" "Some parsley? Did you see it, Lap? Are you sure it was parsley?" "I don't think it was, Mother. I told Trot it was not like parsley, and it did not smell quite like parsley either." "Unhappy child!" cried the mother. "You have eaten *hemlock* instead of parsley, and it is poison. Oh, my child! What shall I do? Lap, run for the doctor!"

Trot sank down nearly senseless in a corner. Now and then he moaned, and moved a foot or an ear. His poor mother stood over him, trying to ease the pain, and longing for the doctor to come. Only once did Trot speak, and then he sobbed: "Oh,

what a pain I have! Mother, do help me! Then he lay quite still. Poor Trot was do!" dead!

Other stories:—"Peter Rabbit"—Beatrice Potter. "Hare and the Tortoise"—Æsop. "Selections from *Uncle Remus's Tales of Brer Rabbit*

Song—"MAIDEN AND THE HARE"

—Brahms, in *Song Garden for Children* (Edw. Arnold, Publisher).

Game—THE RABBITS

1. See the lit - tle rab - bits, so fright - ened and shy; They
frisk a - bout quite gai - ly when no one is nigh.
Eat ing and nib - bling sweet dai - sies white, They
have jol - ly the morn - ing till night.

2. Here comes Farmer Jones with his terrible gun;
His doggy, too, is with him, quite ready for fun;
Quick to their burrows, just under the ground,
The furry little rabbits will never be found.

Directions.—*Verse 1.* The rabbit-children sit on their heels with forefingers pointing at each side of their heads for the rabbits' long ears. They hop about in the meadow (a ring of children).

Verse 2. A big boy (the farmer) walks to the edge of the meadow and carries what represents a gun. A tiny boy (the dog) runs at his heels, barking. The rabbits begin to get frightened, and hop about in a scared manner when they see the farmer and his dog. Farmer Jones takes aim with his gun and shouts, "Pop!" At this the rabbits scud across the meadows and hide in their burrows (gaps between the hedge-children).

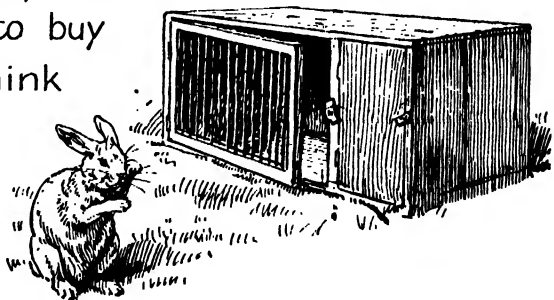
Blackboard Reading and Drawing

"Hark! what was that? I thought I heard a noise. No one near; so I will go on eating my breakfast. I am a wild rabbit. I live in a burrow underground with my wife and family. No rabbit hutches for me! They may be alright for pet rabbits, who dare not go out for fear of their lives; as for me — Hush! what was that, again? I must be off."



See these rabbits; they are having some fun. They do not know that Jack Gray and his sister are watching them. What a pity! Jack has let them know. He moved his foot. How still they are! They are listening. The big old rabbit drums the ground with his hind legs, and off they go, helter, skelter! to their holes.

This is Jack and Sally Gray's little white rabbit. Do you like its hutch? Mr. Gray made it when the children had saved enough pennies to buy their pet. Don't you think Bunny looks very happy? Jack cleans the hutch out often. Sally feeds the little rabbit with fresh leaves.



A Request.

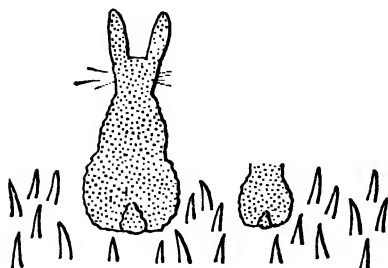


Mavis, piping on the
Tree,
Piping to this little
Lad,
Speckled Mavis, may
it be
That your song shall
cause to flee
All the things that
make him sad.

Mavis on the frozen Bough,
Piping to this ailing Lad,
Speckled Mavis, tell him how
Spring shall come ; yea, bring him now
Springtime, that he may be glad !

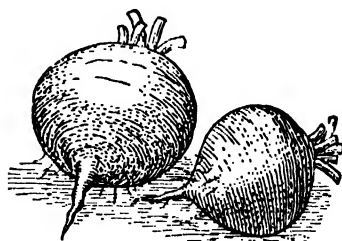
Hamish Hendry
From "Red Apple and Silver Bells"
by permission.

Paper Cutting—MOTHER BUNNY AND HER BABY



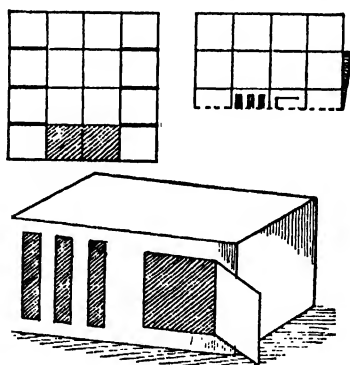
Mount on paper, and crayon whiskers on mount.

Clay Modelling—TURNIPS FOR BUNNY



Get the children to bring a turnip each to school for model.

Paper Folding—RABBIT HUTCH



Fold paper into 16 equal squares; shaded portion forms floor of hutch. Fold rectangle ABCD in two and cut away shaded portions. The door has to be cut and folded back. Fasten with pins or gum as in sketch. Cut along thick lines and pin for sides of hutch.

Free-arm Drawing—RABBIT'S SPLIT UPPER LIP

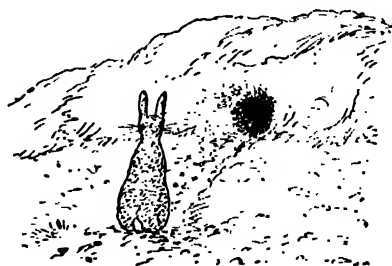


Brush Work—BUNNY'S DINNER



Carrot, bright red; leaves, green; markings and rootlets, brown or black.

Brown-paper Drawing—RABBIT NEAR ITS BURROW



Ground, sandy red or brown; rabbit, same colour outlined in white; tail, white; mouth of burrow, dark brown.

Object Lesson—THE PIGEON

REQUIREMENTS.—A live pigeon if possible. Get a child to bring one to school from the dovecote at home. The bird can be on the table under a waste-paper basket, provided the wickerwork is sufficiently open to let the children see through easily. Various kinds of feathers: feathers of tail and wings (quills), general feathers (contour), simple ones found under the contour feathers, and down or nesting feathers.

PREPARATION.—Refer to last week's chat on pets. The pigeon is another of the children's friends. Who has one? Who has a pigeon house near home? Who cares for the pigeons? What do pigeons eat? What is their song like, &c.? Get the little ones to express themselves freely, and then arrange their ideas.

PRESENTATION.—(a) **Wings instead of Arms.**—(Give the children varied movements of the arms to go through.) How is it they can touch their shoulder with their hand, stretch their arm out, twist their hand, &c.? Because there are joints. How many joints are there? The bird's wing has three divisions similarly. One at the shoulder, another at the elbow, and a third at the wrist. When flying, the bird stretches its wings out wide, but when at rest it folds them close to its body by drawing its elbow back and touching its shoulder with its hand. (Let the children imitate the stretching out and drawing in of wings.)

(b) **Covering of Pigeons.**—(i) *Pigeons are covered with Feathers.*—Besides being warm this covering is light. (Refer to rabbit's coat.) Fur is warm and can easily be kept clean; why, then, is the bird not covered with fur? Such a coat would be too heavy, and would prevent flight, besides tiring the bird. (Let a child take out from bag a handful of feathers.) How light they are! (Then let one or two fall to the

ground.) How slowly and gently they sink. (Now take a penny or some heavy object about the size of the feathers and let that drop.) Which is more likely to help the bird to keep up in the air, a light or a heavy covering? (Let another child plunge its hand into the bag of feathers and say how warm they feel.) Why does the bird need a warm coat?

(ii) *How the Feathers are set on the Body.*—Closely lapping over each other. Why is this necessary? (Let the children stroke the pigeon and tell how smooth and soft and shiny its feathers are.) What would they feel like if the children were to stroke the bird backwards from tail to head? There is a right way for feathers to grow, from the head to the tail. Why is this? Which way does the bird fly? What would happen if it flew backwards. (Show how ruffled feathers would prevent quick flight.)

(iii) *Different Kinds of Feathers.*—(1) *Quills.*—These are the large feathers in the wings and tail of the pigeon. (Show large quills, and distribute as widely as possible round the class. Let the children try to pull the featherlets apart.) What happens? They find the threads seem to stick together. These slender threads grow out of a central stem or shaft. Each thread has a number of hooks which fasten into the next thread, and so prevent air from passing through the feather. It is this close hooking which seems to glue the threads together. (Illustrate by drawing, and hooking of finger tips in each other. Hold left hand palm upwards, with fingers bent, and fasten into these the tips of fingers of right hand held palm downwards.)

(2) *General Feathers.*—Show a handful, and let the children see these kind of feathers on the live pigeon. They are like the quills, only not so long and strong; they

are broader in proportion to their length. Although they seem to do so, they do not grow all over the body. The spreading gives them this appearance. It is the colour of these general or covering feathers which makes the pet pigeons so pretty. Wild pigeons are nearly alike in colour, while tame pigeons, which are often chosen for their appearance, vary in colour. (Compare with the colouring of the wild and tame rabbits.)

(3) *Down or Nesting Feathers*.—(If there are no actual feathers to show the children, make drawing on blackboard.) These feathers are the first that grow. They are soft and limp, and look just like a bunch of fluffy threads. They have no hooks; they are quite loose.

(c) *Eyes and Ears*.—The pigeon has large and perfect eyes. It has no visible ears on the outside of its head. What ears it has, are hidden near the eyes.

(d) *A Baby Pigeon*.—When the young bird is ready to come out of its shell, it taps with its beak until it breaks the wall of its little egg house. Then it comes out. It cannot see; its eyes are quite tightly closed. It looks quite a helpless baby, with no feathers on its body at all, and quite blind. By and by small feathers peep out. They are the soft and downy ones the children have just been hearing about.

At this time the mother takes great care of her young ones. She knows they cannot feed themselves, so she gives them baby-pigeon food which she makes inside her own crop. People sometimes call it pigeon's milk because it is something like curds. Who has tasted curds and whey? The poor little creatures cuddle under their mother's wings, and keep cosy against her warm body until their covering feathers grow. (Show general feathers.) The long quill feathers begin to grow too. By this time the young pigeons will have opened their eyes and now are able to see.

In about four weeks from being hatched they are able to get about in the pigeon-cote by themselves. By watching their parents and fluttering their tiny wings they soon learn to fly.

(e) *Habits of Pigeons*.—(i) They get to know and to love their home. If children wish to keep new pigeons they must shut them up in a cote for some time or they will fly back to their old homes. Carrier pigeons can fly for hundreds of miles and yet be able to find their way back home. What are carrier pigeons useful for?

(ii) They are happy and loving birds. (Let the children tell about the billing and cooing that goes on between these birds. Pigeons care for their young. (Compare with rabbit.)

(iii) They become friendly and tame. Some birds will feed from the hands of the one who brings them food. Others will perch on the shoulders and heads of the boys and girls they love. In a beautiful city, called Venice, the doves there are so tame that they walk about in the city squares and eat scraps that the passer-by throws to them. What do pigeons eat?

ASSOCIATION.—Compare with the rabbit:

1. Wild rabbits are nearly all one colour, while pets are black, brown, white, or grey.

Wild or wood pigeons are mostly one colour, but pet doves vary very much.

2. Pet rabbits live in wooden hutches made by the people who care for them.

Tame pigeons live in wooden cotes which are made on purpose for them.

3. Rabbits become very tame if treated kindly, and know their friends.

Pigeons grow fond of those who care for them.

FORMULATION.—The pigeon has wings instead of arms. The feather covering is both warm and light. Pigeons grow very tame. They are loving birds.

APPLICATION.—See correlated lessons.

Phonetics

PART I.—*Breathing Exercise*. PART II.—“ere” as in “severe”, and revision of “are”, “ire”, “ore”, “ure”.

(i) Command for starting position: “Attention!” (See starting position in last week’s breathing exercise.)

The order given is: “Arms sideways and upwards raising, with Heels raising and Knees bending—One! two! three! four!” At “one!” the arms are raised to shoulder height, heels raised and breath taken in. At “two!” hands turned upwards and arms raised to the vertical. At the same time the knees are turned out and bent slowly to a right angle, breath expelled. At “three!” arms are lowered to shoulder height, palms still turned upwards, knees stretched out, heels still raised, breath inhaled. At “four!” heels sink, hands turned downwards, and arms are brought to sides; breath is expelled. If the command, “Repeat. One! two! three! four!” be given, children go through the exercise again.

(ii) The “ere” sound and its symbol are treated in the same manner as “are”, “ire”, “ore”, “ure” (see preceding Phonetics lessons). Children build the word “severe”, and tell a story about the word. They build such words as: Here, merely, interfere, sphere, sincere. In the case of words like “sphere” and “sincere”, teacher gives warning hints, e.g.: “Use the ‘Ralph ph’ for sphere. The middle symbol in sincere is the ‘ice c’.” Children read sentences from the blackboard containing words with “are”, “ire”, “ore”, “ure” in them.

Blackboard reading: A *score* of pigeons fly round the *spire*. Some are *pure* white; others are grey. They fly down *here* for food. Do not *scare* them. Some pigeons fly for miles without being *tired*. They are *sure* to find their way home. They *rarely* get lost.”

Number

Number 25.

(i) Addition of numbers with sum not more than 25, e.g.:

“A carrier pigeon flew 18 miles one day and 7 miles the next. How many miles did it fly altogether?”

“There were 4 pigeons in the pigeon-cote; 18 were flying about, and 3 were strutting in the yard looking for food. How many pigeons altogether?”

(ii) Exercises on subtraction from 25 of numbers up to 14, e.g.:

“A carrier pigeon was sent with a message to a man 25 miles away. It flew 12 miles on the first day. How far had it still to fly?”

“25 pigeons in 2 cotes. 16 in one, how many pigeons in the other?”

(iii) Multiplication of numbers with product not greater than 25, e.g.:

“How many fives in ten? in twenty? in twenty-five?”

“The farmer’s wife threw corn to the pigeons. 5 pigeons pick up 5 grains each. How many grains of corn altogether?”

“Mr. and Mrs. Ringdove had 3 baby doves. How many were there in the Ringdove family? How many birds in 5 such families?”

(iv) Division into 25 of numbers to 12, e.g.:

“A pigeon-keeper had 25 birds. He flew one-fifth of them. How many was that? How many birds left! 5 pigeons live in one cote. How many cotes has the keeper to look after?”

“Grandpa bought 25 pigeons for his grandchildren. Each child got 5. How many children were there?”

Story—THE FOREST KING'S FEAST

The King and the Queen of the Forest asked some of the birds and beasts to a grand feast.

The Robin, the Thrush, the Blackbird, the Magpie, a pair of Doves, and an old Owl all came. Besides the birds there came a Fox, a Donkey, a Wolf, and a little brown Rabbit.

The table was nicely set out with nuts, seeds, honey, apples, blackberries, and pretty jugs of milk, which the Cow had sent. The Robin and the Thrush each perched on the top of the King's chair, the Magpie stood on a twig near the Blackbird, while the Owl blinked out of a hole in an old oak tree. The two Doves sat quietly and chatted to themselves on the bough of a beech tree close by.

Mr. Fox looked round, and saw nothing in the way of a plump fat hen on the table, so he fixed his eyes on Mr. Rabbit and licked his lips. The Wolf saw nothing that he could eat on the table, so he set his eyes on the Donkey and showed his teeth. The Owl peeped out from the hole in the old oak tree, and saw nothing in the shape of a mouse, so he stood still and blinked at the Thrush and the Robin. The Blackbird and the Magpie were very restless, for they wanted the feast to begin. The Donkey looked over the table, and saw nothing there for him, not even a sweet juicy carrot.

The King said how glad he was to see everyone there. He was just about to sit down when the Queen said: "Don't sit down yet, but say something nice to every one of our friends." So the King began by saying how pleased he was to see Mr. Robin, because he had heard that Cock Robin had been killed by Mr. Sparrow with his bow and arrow.

At this, shy Mr. Robin, who had also heard the same silly story about himself, blushed right down to his breast, and flew away into the woods. And that's why Mr. Robin has a red breast even to this day.

When the Thrush saw Mr. Robin fly away he hopped down from his perch on the King's chair to pick up a worm which he saw on the grass. The King was so vexed at Mr. Thrush's rudeness that he got hold of some of the seeds and threw them at him. A lot of seeds stuck in the Thrush's breast, and when he flew away he looked at himself and cried: "Look at me-ee. Look at me-ee. Pretty bird! pretty bird!" That's why the Thrush has a speckled breast even to this day, and that's why he always sings his songs twice over too.

The Owl, seeing the Robin and the Thrush fly away, went swiftly after them, and cried

"Too-whit, too-whooh!
Who ever knew
A feast without a mouse?"

Just then the Donkey put his head between the King and Queen, and whispered that there wasn't even a carrot on the table. His right ear tickled the Queen's left ear, and his left ear tickled the King's right ear.

Then up jumped both in a rage, and the Donkey ran off, laughing, and saying:

"Hee haw! Who ever saw
A feast without a carrot?"

Just as he ran away, Mr. Wolf got up and ran quickly after him. For a long time they could hear his laugh in the woods, but by and by his laugh seemed to end in a groan, and so they all thought the Wolf had got hold of him. That's why the Donkey's bray begins with a laugh and ends with a groan even to this day.

All this time the two Doves were talking; but the Queen got angry with them, and took off two of her rings and threw them at the birds. The Doves bent down their heads, and a ring fell on each of their necks, so away they flew with them. And that is

why the rings are round the necks of the Ring-doves even to this day.

The Rabbit sat up, showed his teeth, and began to laugh. The King no sooner saw this than he took up a jug of milk and threw it at Mr. Rabbit. The jug missed the Rabbit, but just as he was popping down his hole the cream came off the milk and stuck on Mr. Rabbit's tail. And that's why the Rabbit's tail is white underneath even to this day.

Mr. Fox now ran off after Mr. Rabbit, but he was away down his hole long before the sly fox could catch him. The Blackbird now

seized his chance of getting something nice, so he put his beak in the honey-pot, and almost stuck fast there. When he pulled it out it was quite yellow with honey, and it remains yellow even to this day.

The Magpie at this moment seized the King's silver spoon and flew away with it. The King, the Queen, and the Flower Fairy jumped up and ran after the Magpie; but they never found either him or the silver spoon. And the Magpie has remained a thief even to this day.

—*Blackie's Model Infant Reader.*

Song—"THE PIGEONS"

—*Teachers' Times, February 22, 1907.*

Game—PET PIGEONS

1. A pig - con house come let us make. The birds in - side are wide a - wake; So

when we op - en wide the door, A - way the pig - cons fly and sear, A -

way they fly

rall.

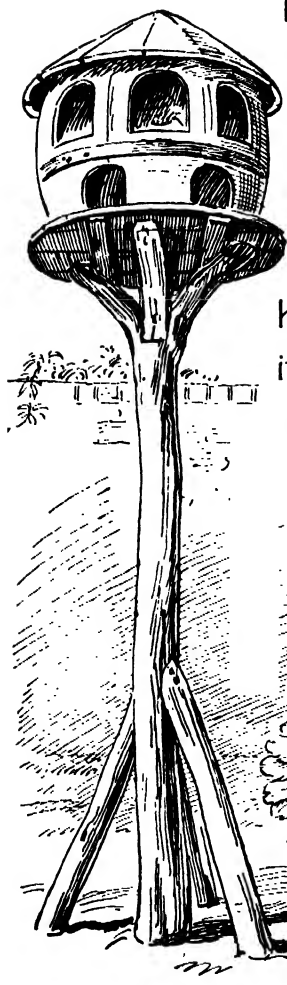
2. Oh, see the pigeons in the sky!
They fly around, now low, now high.
See, each one spreads its soft grey wings,
And then its own sweet song it sings,
Its own sweet song it sings:
Coo-roo, coo-roo.

3. The stars are twinkling in the sky;
The tired pigeons homeward fly.
We'll shut the door and quiet keep
Till all the birdies go to sleep,
The birdies go to sleep.
Coo-roo, coo-roo.

Directions.—*Verse 1.* The children stand in a ring (pigeon-cote) and hold hands. Several smaller ones (pigeons) are inside. The door is opened by two children unclasping hands, and thus forming a gap. The "birds" fly out and round the ring outside during this verse and the next.

Verse 3. The pigeons fly in through the cote door and crouch down with left hand crossing the breast and resting on right shoulder. The right arm is bent over head, and touches the left shoulder. This represents the tucking of head beneath the wing. They close eyes as the ring-children sing very softly "The birdies go to sleep".

Blackboard Reading and Drawing



This is Charlie Wade's pigeon-cote. His father made it, and put it on the top of this long pole. "This will set the pigeons out of reach of the cats," he said. Charlie feeds his pets with corn, twice every day.

Have you watched pigeons flying over the house-tops? They fly round and round as if to say: "Where are we? Let us have a good look round, then we shall know just where our cote is."

What do you think the pigeons sing to each other? It is, "Coo, roo, roo! We love you. Coo, roo, roo! Love us too." Don't you think that is a pretty song?

See this pigeon puffing its chest out. It is speaking to its mate on the broken plant-pot. "Coo! roo! what

a splendid tail you have! It looks like a fan." And the other replies, "Coo! roo! I admire your fine chest." That makes pigeon number one blow his chest out harder than ever. I hope it won't burst. Do you think it will? "Coo! roo." says pigeon number two, "I love you!" .

What the Birds Say.



Do you ask what the
birds say?

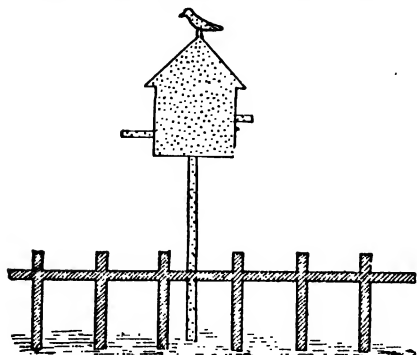
The sparrow, the dove,
The linnet, and thrush
say:

'I love and I love!'

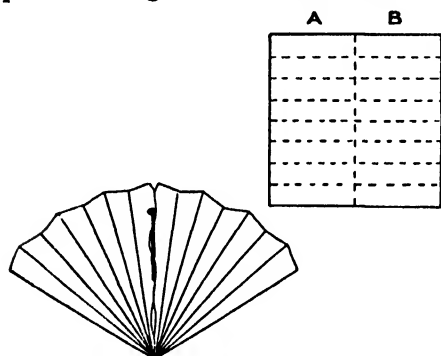
In winter they're silent,
The wind is so strong.
What it says I don't
know;

But it sings a loud
song.

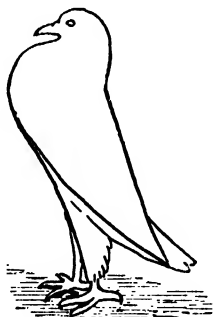
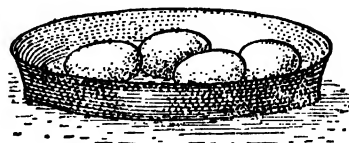
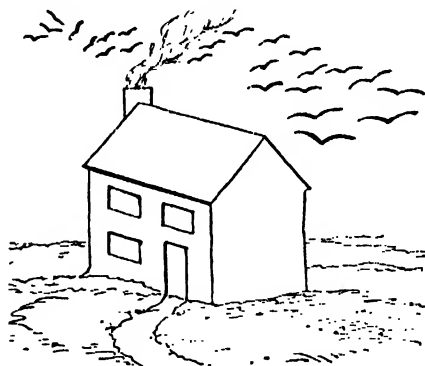
But green leaves and
blossoms,
And sunny warm
weather,
And singing, and loving,
All come back together.

Paper Cutting—PIGEON-COTE

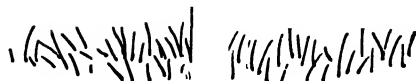
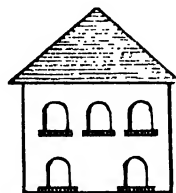
Colours as desired. Let one set of children cut the tails, the more advanced ones the weathercock, and the rest the cote.

Paper Folding—PIGEON'S FAN TAIL

Fold the square into 16 oblongs in concertina form. When folded, bend at middle crease, and pin A and B together.

Free-arm Drawing—PIGEON**Clay Modelling—DISH OF PIGEON EGGS****Brush Work—A MORNING FLIGHT**

House, brown madder; smoke and pigeons, grey; window, door, and ground, Vandyke brown.

Brown-paper Drawing—PIGEON HOUSE

Cote, brown; doors, white; roof, red; grass, green.

SONGS WITH MUSIC

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Game I.—THE BULB FLOWERS

(Page 4)

Poco allegro.

mp

Key D { ḍ. ḍ : t. l | s : f | m : s | m : s | d., s : s., l | s : l | r : -
 1. All the ba-by plants are sleep-ing, sleep-ing, Daf-fo-dil and snow-drop white,

mp

{ ḍ. ḍ : t. l | s : f | m : s | ḍ : s | d., d : d., d | m : r | d : - | - :
 Ve-ry qui-et they are keep-ing, keep-ing, Tucked a-way far out of sight.

Ped.

2. Hear the gentle breezes blowing, blowing,
Waking flowerets from their sleep;
Soon the plants begin their growing, growing,
Tiny shoots begin to peep.
3. Rain and sunshine now are waking, waking,
Crocus blue and tulip red;
All the tiny flowers are shaking, shaking
Each a dainty little head.

Directions.—A few children to represent the raindrops, some the wind, and one child on a chair, holding his hands in a circle, the sun.

Verse 1.—The remainder of the class form a ring, and crouch downwards with bent heads and tightly shut eyes. This verse must be sung very softly.

Verse 2.—The “wind children” hum softly and sweetly, whereupon the “plant children” waken, holding up their heads wonderingly. They slowly stretch themselves and push out outstretched fingers; one hand goes upwards for the shoots, and the other downwards for the roots.

Verse 3.—The “rain children” tap their hands, and the sun shines upon the flowers, who stand upright and gaily shake their arms and heads.

Other games are:—2. “Garden Bed”—E. Poulsson’s *Finger Plays*. 3. “Little Gardeners”—W. Gullen in the *Teachers’ Times*, June 7, 1907.

Game 2.—THE CATKIN SHOP

(Page 12)

Animato.

Tune—"Three Crows".

Key G minor { , l₁ | m₁., l₁ : l₁., t₁ | d., t₁ : d., l₁ | s₁ : s₁., m₁ | s₁ : —., l₁ }

r. "What is this sweet-ness on the breeze? Oh, buz - z - z - z. We said the cat - kin trees;

m₁., l₁ : l₁., t₁ | d., t₁ : d., r | m : m., d | m : —., d | m., m : m., d | r., r : r., t₁ }

know it well, we work-ing bees, Oh, buz - z - z - z." They fly up to the wil-low trees, "Now

{| d., d : d., l | t | t | t : t | d., r | m : r., r | d., d : t | l : l | f | l : — .
 give us of your hon-ey, please." And they all buzz so mer-ri-ly— Buz-z-z-z-z.

2. "What will you give us for our honey?"

Then said the catkin trees;
 "Before we sell show us your money,
 At once now, if you please."
 "To pay you for a drop of honey,
 We'll give you golden pollen money."
 Then all buzzed so merrily—Buz-z-z-z.

3. Each busy bee gets one wee drop.

Oh, buz-z-z-z.
 They love the willow catkin shop.
 Oh, buz-z-z-z.
 They buy till they can buy no more,
 Then fly back with their precious store,
 And they all buzz so merrily—Buz-z-z-z.

Directions.—The "catkin shop" is near a brook, which can be represented by a chalk line on floor. The children hang their arms for branches of willow tree. Other children buzz round and ask trees children for honey. Each "bee" points to pollen on its back in verse 2. The exchange of pollen for honey should go on briskly until verse 3, when the "bees" fly back to their hive—a ring of five or six children in one corner of room.

Game 3--THE SNOWDROPS

(Page 20)

Allegretto.

mp

Key E \flat || M . M : M S . S : S d ., d : r . S M
 r. Qui - et - ly, qui - et - ly, peep dear snow - drops white.

mp

|| S . S : S d! . d! : d! d ., d : r . S₁ d :)
 Care - ful - ly, care - ful - ly, or you'll get a 'right;

|| d ., d : d . d S . M : d l ., l : S . f M . S : r
 Old Jack Frost is wait - ing near, Cold wind, blow - ing, do you hear?



2. "Blowing cold, blowing cold, with my breath so rough."

"Freezing hard, freezing hard, till they've had enough."

Snowdrops shiver hard and sigh:

"Oh how cold! We die, we die!

Pretty world, goodbye, goodbye!"

Dainty snowdrops white.

3. Oh, Jack Frost! oh, Jack Frost! See the great warm sun

Frightens him, frightens him, makes him quickly run.

Hold your head up, Crocus blue,

Ring your white bell, Snowdrop too;

Mister Sun is kind to you,

Dainty snowdrops white.

Directions.—Some children represent snowdrops, while the rest stand round to form a garden. Three larger boys are chosen; one for the wind, another for "Jack Frost", and the third for the "great warm sun".

Verse 1.—The "garden" children bend forward as if to warn the snowdrops against the frost and cold. The snowdrops, who are crouching on the floor, raise their hands, which are held palms together to make the sheath. Each action is done slowly and cautiously.

Verse 2.—The "cold wind" boy sings in a boisterous voice, "Blowing cold", &c. Jack Frost hisses, "Freezing hard, till they've had enough". The snowdrops shudder and begin to sink down until

Verse 3.—The great warm sun (a boy standing on a chair with arms held round for the sun) shines. Jack Frost springs away, the cold wind moans and leaves the room, and the garden children sing brightly. The snowdrops raise themselves with heads between arms for a time. Soon their heads leave the sheath, and they nod and shake merrily. This game is very effective if little girls with white pinafores take the part of snowdrops.

Game 4.—THE SLEEPY MOTHER-TREE.

(Page 29)

Vivo.

Key D { d | t ., l : s ., f m ., r : d ., d | m ., r , d : s ., s }
 i. Ee ee! Ee - ee! We laugh with glee. Just look at this sleep - y
 v. 3. We'll get the warm

{ s : - . , d m ., r , d : s ., s s : - . , d | t ., l : s ., f
 tree! She's not like you and me. Ee - ee! Ee - ee! We

dim.

M., r : d., d | M. r, d : s., s d!
 laugh with glee. Just look at this sleep - y tree.
 v. 3. We'll get the warm

dim.

Ped.

2. Ah, ah! ah, ah! with laughter we shake;
 Oh, how shall we make her wake?
 We laugh till our brown sides ache.
 Ah, ah! ah, ah! with laughter we shake;
 Oh, how shall we make her wake?
3. Oh, oh! oh, oh! we know, we know.
 We'll get the warm wind to blow,
 And breathe on her gently—so!
 Oh, oh! oh, oh! we know, we know.
 We'll get the warm wind to blow
4. Heigh ho! heigh ho! at last, at last
 Her long winter's sleep is past—
 Her green leaves are growing fast.
 Heigh ho! heigh ho! at last, at last
 Her long winter's sleep is past.

Directions.—Children stand as trees in a forest. One child in the centre is the sleepy tree. She stands with bent head, eyes shut, and body apparently lifeless.

At the words "She's not like you and me" the children smilingly nod at each other. In verse 2 the "trees" sway about as if with laughter. This action must be done gracefully, so as to truly imitate nature. In verse 3 the trees look as if they had an idea, and at the words "And breathe on her gently—so!" they suit the action to the words, and, bending forward, blow softly on the sleeping tree. At last the tree awakens, and, looking around, sees the other trees laughing. Slowly she stands erect, arms stretching out and fingers (leaves) beginning to grow.

Game 5.—HAPPY BIRDS

(Page 37)

Allegro.

mf *mf*

Key B♭ : S₁ | S₁ : L₁ : t₁ | d : - : t₁ | L₁ : - : m₁ | S₁ : - : S₁ | S₁ : - : L₁ | S₁ : - : L₁ | S₁ : - : - : S₁ }

1. The wood is full of trees so tall, They grow, you know, they grow. And

Ending for the first 3 verses. *Rall.* Ending for the 4th verse. *Molto rall.* *pp*

d : t₁ : L₁ | S₁ : - : L₁ | t₁ : - : L₁ | S₁ : - : S₁ | S₁ : - : S₁ | S₁ : - : S₁ | S₁ : - : - : - : || S₁ : - : S₁ | S₁ : - : S₁ | d : - : - : - : ||

when the wind blows, then they all Bend so, you know, bend so, sleep, you know, they sleep.

Rall. *Molto rall.* *pp*

2. The mother birdie stays all day;
She sings, you know, she sings;
And, look! the father's far away;
The food, you know, he brings.

3. The baby birds, so small and wee,
To fly, you know, to fly,
They have to work like you and me,
And try, you know, and try.
4. And when the sun goes down at last,
“Cheep, cheep!” they sing, “Cheep, cheep!”
Until the long dark night is past,
They sleep, you know, they sleep.

Directions.—*Verse 1.* Children stand in a ring, which represents the wood. The taller children are the trees, and when the wind blows they bend their bodies and sway their outstretched arms gracefully. Five or six boys can be the wind and whistle softly.

Verse 2. Several smaller rings, for nests, are formed by the trees, and in each of them are the mother bird and her wee ones. The father bird from each nest is hunting for food, which he brings home and gives to the waiting birds.

Verse 3. The mother bird teaches the little ones to fly. The learners imitate the frightened fluttering and twittering. This verse is greatly enjoyed by the little ones, who, when falling, are caught by the mother.

Verse 4. All the birds fly home and settle near their nests—the baby ones in the nests. They all go to sleep whilst the children sing very drowsily. The last line must die away almost to a whisper.

N.B.—These are a few hints, but the teacher with originality will easily select other actions.

Game 6.—CAREFUL MRS. HEN

(Page 45)

Allegretto.

The piano introduction is in E-flat major (three flats) and 2/4 time. It consists of two staves. The right hand plays a series of eighth notes, while the left hand plays a steady eighth-note accompaniment. The piece ends with a fermata on the final chord, marked with a star and the instruction 'Ped.' (pedal).

The vocal melody is in E-flat major and 2/4 time. It begins with a treble clef and a key signature of three flats. The melody is marked 'mf' (mezzo-forte). The lyrics are: '1. See the lit - tle chick - ens Un - der mo - ther's'. The melody is followed by a piano accompaniment in the bass clef, also marked 'mf'.

The piano accompaniment continues in E-flat major and 2/4 time. It features a treble clef and a key signature of three flats. The melody is marked 'mf' (mezzo-forte). The lyrics are: 's . l : d ! , t . d ! , r ! | d ! : s Fast a - sleep they're keep - ing,'. The piano accompaniment is in the bass clef, also marked 'mf'.



2. Minnie¹ brings their breakfast,
 Little chickens run,
 Snatching, picking, scratching,
 Don't they have some fun!
 Peep, peep! &c.
3. Sly old fox is creeping
 Slowly from his den,
 Wants a chick for dinner,
 Frightens Mrs. Hen.
 Flap, flap! &c.
4. "Cluck!" she calls out wildly,
 "Chicks, there's danger near;
 Mr. Fox is watching,
 Chicks, come here! Come here!"
 Cluck, cluck! &c.
5. "Here's a safe, kind shelter.
 Chicks, come under, then
 Mr. Fox must run back
 Hungry to his den."
 Ha, ha! &c.

Directions for Game.—*Verse 1.* Several of the older girls are chosen for hens. They hold out their pinafores for wings. The tiny children crouch beneath the wings and pretend to sleep.

Verse 2. A little girl carrying an imaginary basket on her arm pretends to take out a handful of corn and scatter it on the ground. The chickens run out and pick up the seeds.

Verse 3. The fox—a bigger boy—creeps out of his den, represented by two rows of children facing each other, each child with hands on shoulders of the child opposite. The frightened hens flap their wings.

Verse 4 Hens cry "Cluck, cluck!" waving wings wildly, and sing "Chicks, come here! Come here."

Verse 5. Chickens run under the wings, and the baffled fox slinks back to his den.

¹ Any name.

Game 7.—THE EARTHWORMS

(Page 52)

Andantino.

mp

Key E \flat || d!:-, t: l | s : m : l | s : m : l | s :- | d!:-, t: l | s : m : l |

t. Down in the dark-ness we creep, we creep, Where the bright flow-ers in

mp

|| s : m : d | r :- :- | s : s : s | f : f : f

win - ter sleep; In - wards, still in - wards, like

{ m : r : d | l : - : - d : m : l | l : s : d | r : - : d | d : - : - ||
 this we go; Out-wards, still out-wards, with move-ment slow.

2. Upwards and downwards we dig, we dig,
 Working like spades, though we're not very big,
 Turning and twisting, both great and small;
 So you see, children, there's work for all.

Directions.—*Verse 1.* Children form one long line as for marching. They hold hands on the shoulders of the child in front. Slowly the first child works inwards with a spiral movement, and the other children follow. At the word “outwards” they follow the leader, who represents the head of the worm, and proceed to unwind.

Verse 2. “Upwards and downwards” these movements are made by children, who hold their hands together above their heads and pretend to pierce through the earth. At the word “spades” they imitate digging. At “turning and twisting” they place hands again on shoulders in front and follow the leader, who works his way in a wavy direction.

Game 8.—FATHER FROG AND HIS TADPOLES

(Page 60)

Allegretto.

The musical score is written for three parts: Treble, Bass, and Piano. The key signature is one flat (B-flat), and the time signature is 2/4. The tempo is marked 'Allegretto'. The score includes lyrics for the Father Frog and his tadpoles. The Father Frog's part is in the Treble clef, and the tadpoles' part is in the Bass clef. The Piano part is in the Bass clef. The lyrics are: 'I am the Fa-ther Frog. shog! ker-shog! ker - shog! I sit up - on this log. Ker - shog! ker - shog! ker shog!'. The score includes dynamic markings such as *mf* (mezzo-forte) and *p* (piano).

Key F: d ., m s ., l : s ., m m ., r : d ., r m ., r : m ., r | m : l ., t
 I am the Fa-ther Frog. shog! ker-shog! ker - shog! I

{| d l ., t : l ., s m ., r : d ., r | d ., s l : d ., r d
 sit up - on this log. Ker - shog! ker - shog! ker shog!

2. My Tadpoles wriggle all the day. Ker-shog! ker-shog! ker-shog!
 Very soon they'll learn to say Ker-shog! ker-shog! ker-shog!

3. Some day soon their tails will go. Ker-shog! ker-shog! ker-shog!
Then their legs begin to grow. Ker-shog! ker-shog! ker-shog!
4. Now you see us Froggies all. Ker-shog! ker-shog! ker-shog!
Jumping, swimming, great and small. Ker-shog! ker-shog! ker-shog!

Directions for Game.--*Verse 1.* A bigger boy is chosen for Father Frog, and sits with knees bent and hands on floor in front. He sings verses 1 and 2.

Verse 2. The tadpoles--smaller children--wriggle round the pond, which is represented by a circle of children.

Verse 3. The pond children sing verse 3, whilst the tadpole children wriggle away.

Verse 4. Father Frog, and other frogs who have grown from the tadpoles which wriggled about, jump, swim, and dive backwards and forwards round the pond.

Game 9.—THE RIVER

(Page 67)

Allegro con grazia.

The musical score is written for a piano and voice. It begins with a treble clef, a key signature of one sharp (F#), and a 3/4 time signature. The tempo is marked 'Allegro con grazia.' The score consists of several systems of staves. The piano accompaniment is written in both treble and bass clefs. The vocal line is written in a single treble clef. The lyrics are: 'We'll make a shining river, Flowing by the town, We'll'. The score includes dynamic markings such as *mf* (mezzo-forte) and *dim.* (diminuendo). The piece concludes with a final cadence.

Key G : s | d : - : - | d : - : - | r : d : r | m : d :

1. We'll make a shin - ing ri ver,

Flow ing by the town, We'll

|| d : - : - | d : - : - | s : f : m | l : - : - | r : - : - | - : : ||
 ti - ny fish - es in it,

|| r : - : - | r : - : - | s | l : t | d : - : - | - : - : - | - : ||
 Swim - ming up and down.

2. Put a bridge across the river,
 Where boys and girls may go,
 And pretty boats a-floating,
 Sailing down below.

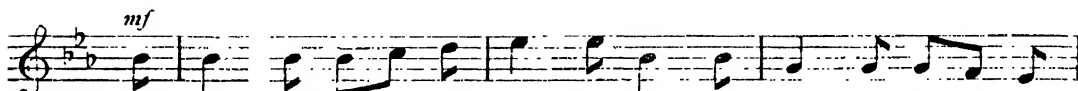
Directions.--*Verse 1.* The river is made by two rows of children, who hold hands facing each other. A good distance between the two rows is required to allow space for fishes, boats, &c., to move about. The river-children glide along with a smooth motion. Boys and girls representing fishes swim between the rows, diving and rising at will.

Verse 2. A bridge is made of an opened barrel hoop held above the heads of the river-children, who glide underneath. The boys, who face each other and sit on each other's feet, are the boats. By holding arms tightly they can move slowly and gracefully down the river.

Game 10.—THE WIND THAT BLOWS IS BEST

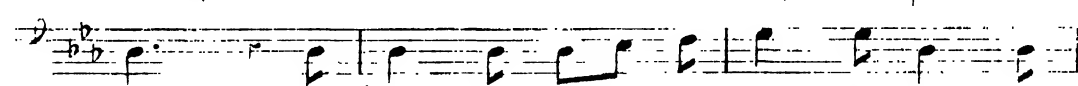
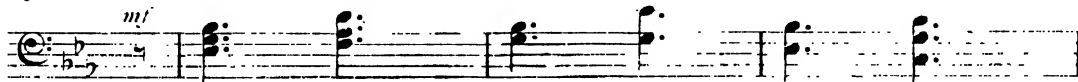
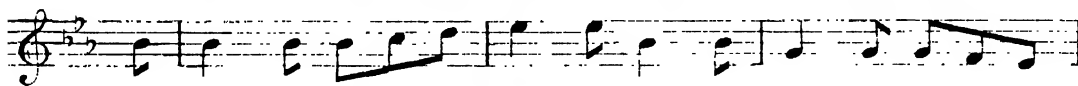
(Page 75)

Allegro.



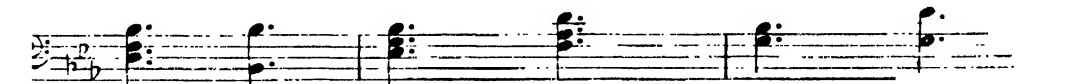
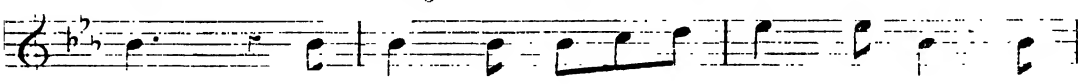
Key E♭ : s | s : — : s | s : l : t | d! : — : d! | s : — : l | m : — : m | m : r

1. "I am the cold North Wind, you know, the cold North Wind,



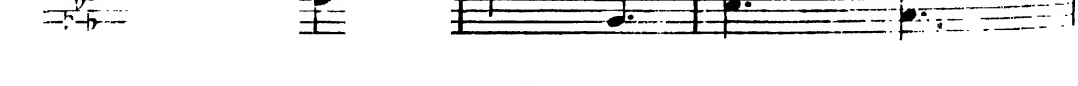
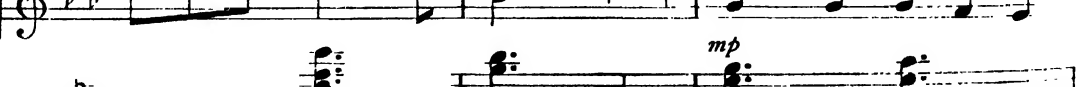
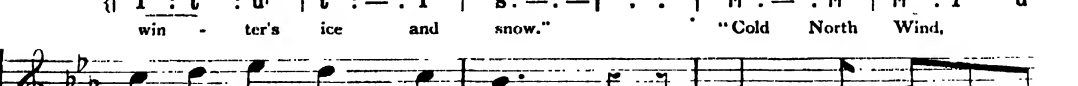
|| s : — : — | : : s | s : — : s | s : l : t | d! : — : d! | s : — : s |

know, I bring cold win - ter's ice and snow, cold



|| l : t : d! | t : — : l | s : — : — | : : | m : — : m | m : r d

win - ter's ice and snow." "Cold North Wind,



Musical score for "The Rose Tree" (No. 100). The score is in 3/4 time with a key signature of one flat (B-flat). It features a vocal melody and piano accompaniment.

Vocal Melody:

 The vocal line is written on a single staff. The lyrics are: "you, you make les glow, So". The melody starts on a half note G4, followed by a quarter note A4, then a half note Bb4. The next measure contains a quarter note C5, a quarter note D5, and a half note E5. The final measure consists of a half note F5 and a quarter note G5.

Piano Accompaniment:

 The piano part is written on two staves (treble and bass clef). The right hand plays chords and single notes, while the left hand plays chords and single notes. The accompaniment includes a bass line with a half note G3, a quarter note A3, and a half note Bb3.

2. "I am the wind that brings the rain, the wind that brings the rain.
I thaw the frozen pond again, I thaw the ice again."
"Warm soft wind, we love you; you make the flowers grow.
So blow, ho, ho! So blow, ho, ho! So blow, ho, ho!"

Directions.—*Verse 1.* Several children representing the cold north wind run round the ring and, waving their arms, blow with their mouths. The other children pretend to shiver and, twirling their fingers, make imaginary snowflakes. They rub their cheeks, and hold out their hands as if welcoming the cold wind.

Verse 2. Cold wind goes moaning away, and the warm thaw wind comes in the ring gently and calmly. The ring-children kneel and hold up their faces as if they were flowers waiting for the rain. At the same time they make the pattering noise of the rain with their hands. Towards the end of the verse they all stand upright as if quite refreshed.

Game II.—THE GROWING SEEDS

(Page 85)

Moderato. *mp*

Key D { | d! : t | l : -. s |

1. We are seeds far

mp

| l : d! | s : m | d : r | m : s | m : -. r | r : s | d! : t

out of sight, In our dark homes 'tis al - ways night; But far a-

mf

|| l : -. s | l : d! | s : m | d : r | m : s | m : r | d

bove us shines the sun, We'll climb to see him, ev - 'ry one.

mf

The musical score is written for a four-part vocal ensemble (Soprano, Alto, Tenor, Bass) and piano accompaniment. It is in the key of D major (indicated by two sharps) and 2/4 time. The tempo is marked 'Moderato.' The score begins with a piano introduction in the right hand, followed by the vocal entries. The first vocal line (Soprano) has the lyrics '1. We are seeds far'. The second vocal line (Alto) has the lyrics 'out of sight, In our dark homes 'tis al - ways night; But far a-'. The third vocal line (Tenor) has the lyrics 'bove us shines the sun, We'll climb to see him, ev - 'ry one.'. The fourth vocal line (Bass) has the lyrics 'Hurrah, at last we look about!'. The piano accompaniment consists of chords in the left hand and a melodic line in the right hand. The score is divided into two systems, with the first system ending with a double bar line and the second system ending with a final cadence.

2. Drinking in the soft spring rain,
Ah! fast asleep too long we've lain;
Our eager fingers stretching out—
Hurrah, at last we look about!

3. **Lovely world, if we'd but known**
You were half so fair, we would have grown,
And hurried on our fresh green dress,
To feel the sunshine's soft caress.

Directions.—Verse 1. The seed children huddled together, crouch on the ground with eyes shut and heads bent. At words "shines the sun" they hold faces up, but still with eyes closed, as if in search of the light.

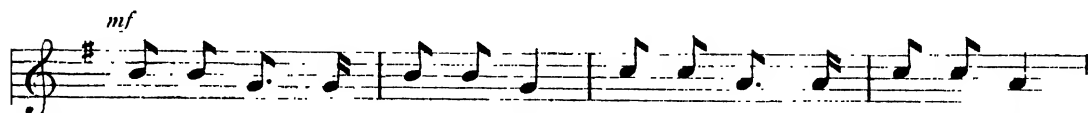
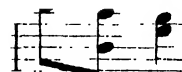
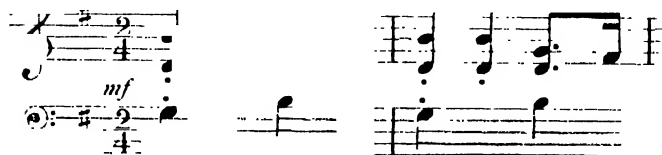
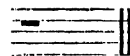
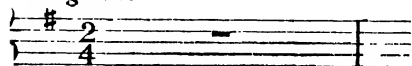
Verse 2. The rain children make the pattering sound of rain with their fingers, whilst the seed children open and close their mouths as if drinking. Fingers, hands, and arms stretch about, until at last, standing on tiptoe, the sprouting plant children gaze eagerly around.

Verse 3. All stand in attitudes representing different flowers, e.g. one child hangs head for bluebell, another holds up face for daisy. The rain children substitute the third personal pronoun for the first. For example: "Lovely world, if they'd but known . . . they would have grown," &c.

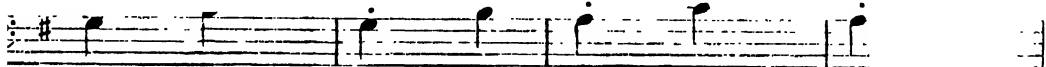
Game 12.—FARMER BROWN'S SHEEP

(Page 93)

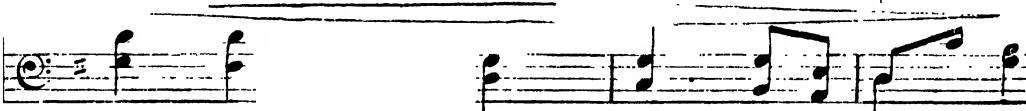
Allegretto.



Key G { m . m : d . , d | m . m : d | f . f : r . , r | f . f : r
1. Far - mer Brown now comes this way, Walk - ing by him old dog Tray;



{ m . m : s . , s | d . d : m . , d | l . t . : d . f | m . r : d
In the field he drives the sheep, And tells dog Tray safe watch to keep.



2. One old black sheep tries to roam,
Good dog Tray soon drives him home;
Farmer takes them one by one,
Now off to the washing stream they're gone.

3. See, their wool is clean and white!
Is it not a pretty sight?
Then the farmer brings his shears—
The little sheep need have no fears.
4. Little by little he cuts the wool;
Soon the bags will all be full.
When the sacks will hold no more
The sheep run back—one, two, three, four.

Directions.—*Verse 1.* A large boy as the farmer, helped by a smaller boy as the dog Tray, drives the sheep into the meadow, which is marked by a chalk line.

Verse 2. One sheep tries to jump the hedge (chalk line), but is driven back by the dog. Farmer takes sheep across to the stream, marked by another chalk line.

Verse 3. After dipping the sheep in the stream, the farmer pretends to get his shears.

Verse 4. He dramatizes the cutting of the wool, himself seated with the “sheep” between his knees, and pretends to put the wool in an imaginary bag held by another child. As each “sheep” is finished with, it skips back with glee to the meadow.

Another suitable game can be made from “Eight White Sheep”, a recitation in *Recitations for Infant Schools*, compiled by Margaret Riach (Blackie). To simplify the same, have four sheep instead of eight and one watchdog instead of two, e.g.

“These are four white sheep all fast asleep,
And one old dog close by;
All through the night his watch is bright,
For fear a wolf comes nigh”.

Game 13.—THE CATERPILLARS

(Page 101)

Allegro moderato.

mf *dim.* *mf*

Key G || m : — : — | r : — : — | d : — : — | — : — : — | m₁ : s₁ : d | m₁ : s₁ : d | t₁ : — : — | : s₁ |

1. Eat, eat, eat, small cat - er - pil - lars are we, Green

mf *dim.* *mf*

dim. *mf*

f : — : — | m : — : — | r : — : — | — : — : — | l₁ : t₁ : d | l₁ : t₁ : l₁ | s₁ : — : — | : s₁ |

leaves are sweet, break - fast, or din - ner, or tea, Oh

2. #

dim. *mf*

m : — : — | r : — : — | d : — : — | : t₁ : d | r : — : — | m : — : — | f : — : — | : s₁ |

food, food, food, we must pack a - way, Por-



2. Grow, grow, grow, tiny skins stretching too tight;
So ho, ho, ho! we'll cast them all off to-night.
Now swell, swell, swell till the coat is split;
Then all is well, creep out through the slit.
3. Creep, creep, creep, finding a snug place to hide;
Then sleep, sleep, sleep, everyone quite satisfied.
Now rest, rest, rest through dark winter's night,
For sleep is best till the sun shines bright.
4. Wake, oh wake! Summer is here once again;
So shake, shake, shake, dainty wings fluttering; then
The sun will dry all our bodies light,
Then off we fly far away from sight.

Directions.—*Verse 1.* Children walk slowly about, eating all the time. Occasionally they stretch their arms above their heads, hands together and palms outwards, and then curve them downwards. This is to imitate the curve the caterpillar's body makes when travelling.

Verse 2. Children stand with arms close to sides and bent at the elbows as if for running. At "Grow, grow, grow" they push out their elbows, but keep hands close to chest. At "Swell, swell, swell" the hands leave the chest, and arms stretch out in a semicircle. At line 4 the children push head and shoulders forward and step with feet.

Verse 3. All find a place of rest, e.g. a corner, desk, wall, and, turning head over shoulders, pretend to weave a cocoon. They go to sleep.

Verse 4. Children step out of imaginary cocoon and flutter their arms; then, tripping lightly on tiptoe, they "fly" round the room.

Game 14.—CLOUDS AND SUNBEAMS

(Page 109)

Animato.

mf

Key F || s . , l : s . f | m . f r . m : f m . f : s
 1. "Wak - en up, the day is Chil - dren dear, Do you hear?

mf

Shine , l : s . f | m . f : s | r m
 a - way and have no fear, Gol Sun

res.

2. "When we shine the clouds so grey
 Seem to say
 'Go away;
 Come again another day,
 Golden Sunbeams'."

3. "Shine away and have no care,
Fill the air
Everywhere
With your rays of light so fair,
Golden Sunbeams."

Directions.—*Verse 1.* This game is rather noisy, and is therefore more suited to the playground than the classroom. The sun, one of the elder boys, stands behind the sunbeam children, who are in a row. In front of these are a number of cloud children, who stand holding hands sufficiently far apart to allow the "sunbeams" to dart through them. All are facing the "earth", viz. the opposite wall. The object of the "sunbeams" is to try to reach the earth; the game for the clouds is to stop and catch the beams before they can accomplish it. The sun sings this verse.

Verse 2. The sunbeams reply, and get ready to dart out.

Verse 3. Whilst the sun is again urging them to shine, the "sunbeams" burst towards the "earth". Those who are caught before reaching it must stay behind the clouds. When all the sunbeams are caught, a tug-of-war between the clouds and sunbeams will make a happy ending.

Another game can be made by adapting "Little White Lily Sat by a Stone", by Geo. Mac Donald, in *Recitations for Infant Schools*, by M. Riach (Blackie).

Game 15.—THE PICNIC IN THE WOODS

(Page 117)

Alliegretto.

The musical score for 'The Song of the Lark' is presented in three staves. The top staff is for the vocal line, the middle for the piano, and the bottom for the cello. The key signature is one flat (B-flat), and the time signature is 6/8. The vocal line begins with a rest, followed by a melodic phrase. The piano accompaniment features a steady eighth-note pattern in the right hand and a more complex rhythmic pattern in the left hand. The cello part provides a harmonic foundation with a series of eighth notes. The score is marked with a 'mf' (mezzo-forte) dynamic.

Key F { : s | s : — : s | m : — : d . d | t | : — : f | l | : — : l |

1. Oh! here we come to the shady dell, to

Musical score for the song "The Birds" from "The Sound of Music". The score is written for voice and piano. The key signature is one flat (B-flat), and the time signature is 4/4. The lyrics are: "ga - ther flow - ers gay, And hear the birds we". The score includes a vocal line with lyrics, a piano accompaniment line, and a bass line. The lyrics are: "ga - ther flow - ers gay, And hear the birds we".



2. Hurrah, we know 't is time for tea.
Our table is the ground;
The cloth is spread, we laugh with glee,
And seat ourselves around.
3. 'T was jolly playing in the glade,
Away from scorching sun.
We thank you for your pleasant shade,
Dear trees; now home we run.

Directions.—*Verse 1.* Several of the taller children stand with arms outspread to represent the trees. One or two smaller boys nestle close to them and whistle softly, imitating birds. Two girls carry a basket between them. They bend as if beneath its weight. They are followed by the remainder of the picnickers.

Verse 2. After gathering flowers, the children stand round the basket, while the eldest girl takes from it a cloth (sheet of paper would serve equally well), and proceeds to spread it on the ground. All children sit round it and pretend to eat and drink.

Verse 3. The children rise, pick up their flowers, and some help to fold cloth. They point to the "scorching sun", and then turn to the trees to thank them. The two girls pick up the now empty basket, and swing it merrily as they walk out of the woods, surrounded by the other picnickers.

Game 16.—DANDELIONS AND DAISIES

(Page 127)

Allegro moderato.

Tune—"Oranges and Lemons".

mf

Key C { d . l : s . f | m . r : d d . l : s . f | m . r : d }
 Dan - de - lion has come to town Dressed in her yel - low gown;

mf

{ s . d : t . l | s . f : m s . d : t . l | s . f : m }
 Dai - sy, too, with eye so bright, In her bon - net neat and white.

mf

{ d . l : s . f | m . r : d . t | d . l : s . f | m . r : d . d }
 Flow - ers, sweet, we chil - dren love you, Bright as gold - en stars a - bove you!

|| 1 . f : r . t | s . m : d . m | f . l : s . t d! : d
 Dan - de - lions and dai - sies, We chil - dren sing your prai:

cres. *f*
mp
 || d . d . d : m . , m | r . , r : d | m . m . m : s . , s | f . f . f : m
 Now, if you please, 'tis time for bed. Here, lit - tle clock, we blow off your head.

f *dim.* *f* *dim.*
 || l : s | t : d! | r : s | m : | l : s | t : d! | r : s | d : ||
 One, two, three, four, poor old head, Five, six, sev'n, eight, time for bed!

f *dim.* *f* *dim.*

Directions.—Two of the elder children are chosen to represent the dandelion and the daisy; if they wear wreaths of flowers it will make the game pretty. The game is played as in "Oranges and Lemons", or "London Bridge is Broken Down". The two children face each other, and, holding hands above their heads, form an arch through which the remainder of the children pass in single file. At the words, "Now, if you please, 'tis time for bed", the procession moves through very slowly. The last child is caught, and has to choose between dandelions and daisies. When all the children are caught, a tug-of-war finishes the game.

Game 17.—BUTTERCUPS AND FAIRIES

(Page 135)

Animato.

mf

mf

Key C { d! . d! : d! . d! | d! : m! | d! . d! : l . l | s | l . t : d! . l }

1. Hap - py fair - ies trip - ping, Danc - ing in a ring, See us gai - ly

mf

p

{ t : t | f . s : t . l | s : | d! . d! : d! . d! | d! : m! | d! . d! : l . l }

skip - ping, Mer - ri - ly we sing, Ah! we hear a foot - step! Quick - ly run -

p

m . s : d! . t | l . s : m . d | r : r | d

Fair - ies nev - er must be caught while at their play.

2. We are pretty flowers;
See us holding up,
Ready for the showers,
Each a golden cup.
When the lovely fairies
See the raindrops fall,
They will know quite well that there is drink for all.

Directions.—Verse 1. Some of the smaller girls kneel on the ground to imitate buttercups. Each child holds the palms of both hands together to catch the raindrops. Other children are the fairies, who dance lightly in a ring round the buttercups. When a boy comes walking along, each fairy jumps behind a flower to hide.

Verse 2. A few children in the distance clap their hands gently, to imitate the falling rain, whilst the flowers are singing this verse. After the shower the fairies step out and pretend to drink from the golden cups.

Game 18.—THE BEES

(Page 143)

Tune and words of verses 2 and 3 from "The Bee" game in Book I of *Blackie's Model Readers*.

Allegro.

mf

Key G || s : f | m

1. Zoom, zoom, zoom!

mf

dim.

| r . m : f . r | d | m . f : s . m | r . m : f . r | m . f : s . m

We will make a hive. Can you hear the work - ers hum - ming? Quick! get read - y.

dim. *cres.*

f

{ | r . m : f . r | s : f | m | r . m : f . r | d

they are com - ing. Zoom, zoom, zoom! Glad to be a - live.

2. Zoom, zoom, zoom! sing the bees all day
 In the garden bright and sunny,
 Buzzing, sipping, making honey.
 Zoom, zoom, zoom! Hard at work are they.

3. Zoom, zoom, zoom! How they love the light!
All day long they work in clover,
Then fly home when work is over.
Zoom, zoom, zoom! They are out of sight.

Directions.—Verse 1. Seven or eight children form a ring for the hive by holding hands, except at one point, the door of the hive. Inside, the working bees are humming and getting ready to fly out. This verse is sung by the hive children.

Verse 2. The bees leave the hive and fly into the garden, which is represented by children who pretend to be flowers. The workers buzz about from flower to flower, and use their fingers as the bees use their trunks. Garden-children sing this verse.

Verse 3. All the children sing verse 3, and the bees fly back to the hive, taking care to reach it before the words of the last line.

Game 19.—HAYTIME

(Page 152)

From Song in Book I of *Blackie's Model Readers*.

Vivo.

mf

The musical score is written for a piano and voice. It begins with a treble clef and a key signature of one sharp (F#). The tempo is marked 'Vivo.' and the dynamic is 'mf'. The score consists of several systems of music. The first system shows the piano accompaniment with chords and single notes. The second system introduces the vocal melody with lyrics: '1. Come out, come out, With song and shout, And toss and turn the'. The third system continues the vocal melody with lyrics: 'r:— | :s . t | r! : r! | t : s | s:—d! | d! : s . t | r! : r! | t : s | di:— ||' and 'hay; And make it sweet and good to eat, This sun - ny sum - mer day.' The fourth system shows the piano accompaniment with a 'cres.' marking. The fifth system shows the vocal melody with a 'cres.' marking. The sixth system shows the piano accompaniment with a 'cres.' marking.

mf

Key C: $\dot{d} . \dot{m} \mid s : s \mid m : d \mid r . d : r . m \mid r : d . m \mid s : s \mid m : d$

1. Come out, come out, With song and shout, And toss and turn the

mf

cres.

cres.

cres.

2. The farner's kind,
 And will not mind
 However much we play;
 So come along,
 With shout and song,
 And help him make the hay.

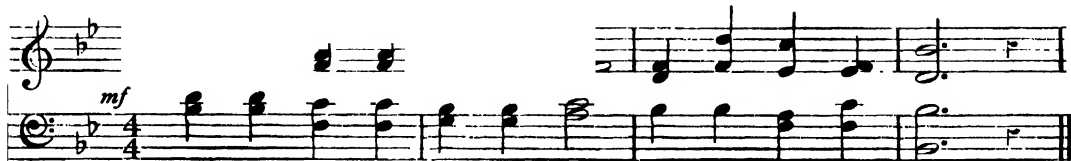
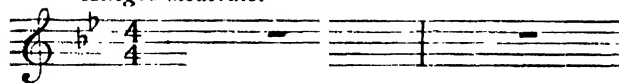
Directions.—*Verse 1.* The children trip out in twos whilst teacher plays the piano. When all are arranged they pretend to make the hay. The raking movement should be easy and rhythmic, all the haymakers moving together.

Verse 2. If teacher wishes, the movements for this verse may be quite free, each child doing as he or she wishes.

Game 20.—THE BLACKSMITH'S SHOP

(Page 161)

Allegro moderato.



Key B \flat || d . d : d . d | t₁ : t₁ | l₁ . l₁ : l₁ . l₁ | f₁
r. "Bu - sy Mis - ter Black - smith, Will you make a shoe?



|| r₁ . m₁ : f₁ . s₁ | l₁ : t₁ | l₁ : m₁ | s₁ | d . d : d . d | t₁ : t₁
If you can't I shan't know what to do. Make your ham - mer ring, and



|| l₁ . l₁ : l₁ . l₁ | f : - | m : m | r : s₁ | d : - | - : s₁ | m : - | r : s₁ | d : - | - :
make your bel - lows blow, We have far to go, With ding! ding! ding! doh!"



2. "I will do it now, sir;
All is ready, see!
Lift your foot up, Dobbin, on my knee.
Then I put the nails in, driving straight and strong,
While I sing my song,
With ding! ding! ding! dong!"
3. "There! I think 'tis mended.
Fourpence, please, to pay."
"Thank you, Mr. Blacksmith. Now, good day!
Gee up, Dobbin, let us gallop on our way.
Hear the blacksmith say
His ding! ding! ding! day!"

Directions. -The class may be divided into riders, horses, and blacksmiths. Each rider knows the blacksmith to whom he must go.

Verse 1. The riders advance towards the blacksmiths, holding their horses, which limp badly along. At the words "Ding! ding! ding! doh!" the blacksmiths pretend to strike on the anvil.

Verse 2. Blacksmiths sing, and lift horses' feet backwards. They pretend to drive in the nails.

Verse 3. When they have finished, they hold out their hands for the pay. The riders hand over the money and prepare to set out. The horses and riders gallop away to the music of the blacksmith's "Ding! ding! ding! day!"

Game 21.—AT THE SEASIDE

(Page 170)

Allegretto.

Key C { . s | m ., m : r ., r | m ., m : r ., r | m : -., f | m . s }

1. Oh, we are mer - ry lit - tle girls and boys, Who

{ d! ., d! : d! ., d! | r! ., d! : t ., d! | r . s | d! ., d! : s ., s }

love to play all day be - side the sea! A ti - ny spade and

{ m ., m : d ., m | s : -., l | s . s | d! ., d! : s ., s | m ., m : d ., m }

pail the best of toys, We dig a - way as bu - sy as can



2. And we're the ships a-sailing to and fro.
The wind you hear, who sings his noisy song,
Will swell our sails, and, with a steady blow,
He'll help these tidy little crafts along,
He'll help these tidy little crafts along.
3. Oh, see the donkeys standing in a row!
Their master's waiting, holding out his hands.
We'll pay our fare—Hurrah, hurrah! we go,
With gallop, and gallop, and gallop along the sands,
With gallop, and gallop, and gallop along the sands.
4. We little ones are wading by the shore,
Our clothes tucked up, our stockings in one hand.
The tiny waves are best; the big ones roar,
And make us paddle quickly back to land,
And make us paddle quickly back to land.

Directions.—*Verse 1.* A chalk mark is made on the floor, and children are told that this represents the edge of the sands; farther than that line is the sea. Some of the children pretend to dig the sands, carrying, patting, and arranging it into imaginary castles.

Verse 2. The boys, arranged in pairs, are the ships sailing on the "sea". The boys face each other, holding arms and sitting on each other's feet with knees bent. In this way they can make headway across the sea.

Verse 3. Some of the children stand in a row some distance off. They are the donkeys; their master is an elder child. Other children come up, and after paying their fare they stand behind the "donkeys". At the words "Hurrah, hurrah!" the donkeys gallop off, followed by their riders.

Verse 4. The smaller children paddle close to the shore, and hold up their skirts; the boys can fold back the knees of their knickers. At the word "roar" they all rush back to land.

Game 22.—THE LIGHTHOUSE

(Page 177)

Allegretto.

mf

Key G || d : — : — | s : — : — | t₁ : — : l₁ | s₁ : l₁ : t₁ | d : — : — | s₁ : — : — | r : — : — | : — :

1. We will make a light - house straight and

m : — : — | s : — : — | l : — : — | l₁ : t₁ : d | r : — : — | m : — : — | r : — : — | : — : — :

Which will guide all the ships a - long.

See the keep - er brings his light,

Climbs the stairs to the top - most flight,

Ped.

cres.

cres.

2. See the breakers dash upon the shore;
Sailors fear when they hear them roar;
But the light shines merrily,
Lighting up all the angry sea.

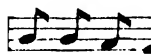
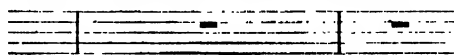
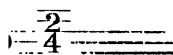
Directions.—The lighthouse is represented by a tall boy who stands upon a chair holding a taper in his hand. The remainder of the class form a ring (the sea) round the rocks (other children in a smaller ring) upon which the lighthouse is built. The keeper brings a lighted taper, and pretends to climb stairs. He lights the lighthouse "lamp". *N.B.*—The actual lighting may be omitted, if the teacher objects on the ground of danger from fire. A few boys can be ships (see last week's game) sailing on the angry sea, which is represented by the ring-children, who clasp hands and raise them above their heads and let them fall again to the rhythm of the music, in imitation of the action of the waves.

Game 23.--OFF FOR THE HOLIDAYS

(Page 184)

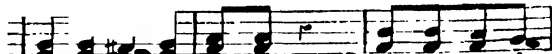
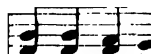
Allegro moderato.

Tune—"Riding down from Bangor."



|| l . l : | t . t : l . s | s : | s . s : fe . s | l . l : | t . t : l . s |

chil - dren To the sea a - gain. Hark! we hear the whis - tle, See the sig - nal





2. Get in, get in quickly,
 There's no time to wait;
 Soon the train will start off,
 Not a minute late.
- See! the guard is waving;
 He cries: "Off we go!"
 Engine driver answers—
 Now the sea, Heigh-ho!

Directions.—*Verse 1.* A line should be drawn on the floor to represent the edge of the platform. Half the children, in single file, form a train, with two boys to act as engine driver and guard respectively. Let one child stand on a chair, and extend her arm for the signal. Choose several children for porters, newspaper boy, &c. The rest of the class are the passengers. At the beginning of the game the train stands in the farthest corner of the room. The train moves down the line, the engine whistle blows, the signal drops, and the speed slackens down until the train is alongside the platform.

Verse 2. The passengers board the train, i.e. they stand in single file with the "train" children. The guard walks along the standing train, and, blowing his whistle, waves his flag. The driver answers with the engine whistle, and the train begins to move off, slowly at first, but afterwards with increasing speed.

Game 24. —THE RAILWAY STATION

(Page 191)

Allegro non troppo.

f Ped. * Ped. * Ped. * Ped. *

Key F : s₁ | d : — : d | s : — : s | t₁ : — : — : — : s₁ | f : — : f | l : — : l | s : — : — : | l : t :

1. "Hur - rah, hur - rah! we go Off on our hol - i - day Now

f Ped. Ped. Ped. Ped.

{ d₁ : — : m | t : — : l | s : — : m | d : — : l₁ | s₁ : f e₁ : s₁ | l₁ : — : m | d : — : — : — : ||

get the tick - ets, please, and ask What time we start a - way."

Ped. *

2. "All tickets, if you please!
 'For Blackpool,' did you say?
 You start from platform number three.
 Walk down the long subway."

3. The train is coming in;
We hear the whistle blow.
The porter opens wide the door;
Jump in, and don't be slow.
4. The station bell now rings;
'Tis time to start, I know.
The guard now waves his flag and sings,
"Away there! off we go."

Directions.—Verse 1. A party of children enter the booking hall, which is denoted by a chalk line on the floor. One of them pretends to buy the tickets, which the clerk, another child, hands to him.

Verse 2. Before going on the platform (also marked out with chalk), the ticket collector stamps the tickets and points towards the subway.

Verse 3. The party walk down the subway, a lane made by two rows of children facing each other and holding hands above their heads. As the train, a line of children comes in, the porter opens a "door", and the holiday-makers step inside.

Verse 4. Some child rings the station bell, and the guard waves his flag, calling out "Away there!" The engine gives a whistle, and the train moves along.

Game 25.—HOW THE FARMER DOES

(Page 202)

Allegretto.

Old Words and Tune.

mf

SOLO.

mp

Key F: d . m | s : s : s . l | s : m : d . r | m : m : m . f | m : d : s . s |
 r. Would you know how does the far - mer, Would you know how does the far - mer, Would you

mp

|| d : d : r . r | m : s : d . m | r : s : t | d : —
 know how does the far - mer, Plough his fields in the spring?

CHORUS.

f

: d . m | s : s : s . l | s : m : d . r | m : m : m . f | m : d : s . s |
 Oh, 'tis so, so does the far - mer, Oh, 'tis so, ' so does the far - mer, Oh, 'tis

f



2. Would you know how does the farmer
Sow his barley and wheat?
Oh, 'tis so, so, &c.
3. Would you know how does the farmer
Reap his barley and wheat?
Oh, 'tis so, so, &c.
4. Would you know how does the farmer
Thresh his barley and wheat?
Oh, 'tis so, so, &c.
5. Would you know how does the farmer
Sift his barley and wheat?
Oh, 'tis so, so, &c.
6. Would you know how does the farmer
Carry his barley and wheat?
Oh, 'tis so, so, &c.
7. Would you know how rests the farmer
When his day's work is done?
Oh, 'tis so, so rests the farmer
When his day's work is done.

Directions.—If children have seen Millet's "Sower", or "The Gleaners", the interest in this game will be all the keener.

Verse 1. The children stand behind each other, single file, in a circle. First child sings, "Would you know how does the farmer plough his fields in the spring?" All the children move round, singing, "Oh, 'tis so, so does the farmer", &c.

Verse 2. The second child sings, "Would you know how does the farmer sow his barley and wheat?" All the children then move round the circle singing and dramatizing "Oh, 'tis so, so does the farmer", &c., at the same time imitating with both hands the action of the sower.

Verse 3. The third child sings, "Would you know how does the farmer reap his barley and wheat?" Children move round in a circle singing and imitating the action of the reapers, &c.

Verses 4 and 5. Sung by fourth and fifth children. Ring-children need not move round for these verses.

Verse 6. As in verses 1, 2, and 3.

Verse 7. Children imitate tired and sleeping farmer.

Game 26.—THE ORCHARD

(Page 210)

Moderato.

Tune—"Comin' through the rye".

mp

Key G || S | . , S | : S | , M . - | r . , d : r , M . - | S | . , S | : l | . , S | d

1. Au - tumn time has come at last, Sing ha, l l heigh - bo!

mp

{ S | . , S | : S | , M . - | r . , d : r , M . - | S | . , S | : l | . , S | d : - .

Gol - den sum - mer days are past, Now the soft winds blow;

|| s ., m : d , m . - | r ., d : r , m . - | s ., m : d ., s | l : - . ||

On the or - chard ap - ple trees, Sing ha, ha! heigh - ho!

|| s ., m : f ., r | m ., d : r , m . - | s | ., s | l | ., s | d : - . ||

Brown leaves qui - ver in the breeze, Now the soft winds blow.

2. Apples ripe upon the bough,
Sing ha, ha! heigh-ho!
Ready to be gathered now,
Now the soft winds blow.
Bring the ladder 'neath the tree,
Sing ha, ha! heigh-ho!
Shake the fruit on Fred and me,
Now the soft winds blow.

See the apples ripe and red,
Sing ha, ha! heigh-ho!
Lying round where'er we tread,
Now the soft winds blow.
Catch the fruit so quickly falling,
Sing ha, ha! heigh-ho!
Hark! dear mother's voice is calling,
Now the soft winds blow.

Directions.—The taller children stand in groups representing apple trees; the smaller ones are the fruit pickers. One or two children can hide in a corner of the room and make a soft sound as of wind whispering. Choose a big girl for the mother.

Verse 1. All children sing this verse; at line 3 the "wind" blows. The tree-children twirl fingers for fluttering leaves.

Verse 2. Tree-children bring out from their pockets red balls from the babies' gift boxes. They hold them by the cords as if they were apples. When trees are shaken, the apples drop.

Verse 3. Children pick the apples up and put them in imaginary baskets or pinafores. When the mother calls, "Children, time to come home!" they all rush away with their treasures.

Game 27.—GOODBYE TO THE SWALLOWS

(Page 218)

Allegretto.

The musical score is written for a piano and voice. It begins with a treble clef, a key signature of one sharp (F#), and a 4/4 time signature. The tempo is marked 'Allegretto'. The score includes a piano introduction, a vocal melody with lyrics, and a piano accompaniment. The lyrics are: '1. "Swal-lows, tell us why you fly, Skim-ming through the cloud-y sky?"' and '2. "Lit-tle ones, the day is near, When we fly a-way from here."'. The score is marked with dynamics such as *mf* (mezzo-forte) and *mp* (mezzo-piano). The piano part features a steady eighth-note accompaniment in the right hand and a more active bass line in the left hand.

2. "Summer has not passed away;
Stay, oh, pretty swallows, stay!"
"Little ones, the wind blows bleak;
We our winter home must seek."

3. "Swallows, will you come again
After winter's snow and rain?"
"When the summer skies are clear
We'll return, oh, children dear!"

Directions.—*Verse 1.* A group of swallow-children dart out of one corner of the room and fly swiftly with outspread arms across the "sky". The remainder of children sing line 1. When the swallows answer they all point in one direction—"away from here".

Verse 2. Children advance towards the swallows, who are fluttering round, and sing lines 1 and 2. All shiver when the swallows answer, and gaze in direction of "winter home".

Verse 3. Swallows fly gently away. Children twirl fingers in imitation of falling snow, and make the patter of rain. The flying swallows turn their heads to reply.

Game 28A.—THE SQUIRRELS OF HAZEL WOOD

(Page 226)

Allegro moderato.

Key C { | d' : m' m' | d' : s. m | m' : r' | d' : | s : s. l. t | d' : | l : d' d' | s. s : m
1. We are the squirrels of Hazel Wood; Skip! jump! and a-way! Hunt - ing for hazel nuts

{ | r : r | r : | m : s. s | l : d' | r' : — | | m' : m' d' | r' :
ripe and good, Read - y for rain - y day. See there on high



2. Here on the hazel-boughs, swinging so high,
Chitter, chatter, and cheep!
First towards the earth, then up to the sky,
Next through the branches we peep.
Now play is o'er,
Gather our store,
Just one nut more.
Chitter, chatter, and cheep!
3. Down in the tree trunk snug and deep,
Squirrels young and old,
There we can huddle and go to sleep,
All through the winter cold.
When the spring sun
Wakens each one,
Then we have fun,
Squirrels young and old.

Directions.—*Verse 1.* All the children can be squirrels; if, however, this proves too noisy, select about half a dozen boys and girls to take the more active part, while the others sit quietly nibbling away at their nuts. All the children sing. Other actions are suggested by the words.

Verse 2. Children use arms as if they were tree branches swinging. At the word 'peep' the squirrels peep through their own fingers. At line 5 they search busily for nuts.

Verse 3. All cuddle up and close their eyes as if for winter's sleep. At line 5 they awaken, look around, and begin to skip about.

Game 28B.—THE SQUIRREL

(Page 226)

The Kindergarten Room—Tristram (Blackie & Son).

Moderato.

Tune—"Let Erin remember the Days of Old".

The first system of musical notation for 'The Squirrel'. It consists of a treble clef staff and a bass clef staff, both in 4/4 time. The key signature has one flat (B-flat). The melody in the treble staff begins with a quarter rest, followed by a series of eighth and sixteenth notes. The bass staff provides a harmonic accompaniment with chords and moving lines. A dynamic marking of *mf* (mezzo-forte) is placed below the first measure of the bass staff.

The second system of musical notation. It continues the melody and accompaniment from the first system. A dynamic marking of *mf* is placed below the first measure of the treble staff.

Key F: s | d : d, r | m : m, f | s : s | f : m, f | s : - l | m : d | r : - | d : s |
 r. The squir - rels scud a - cross the grass In a ver - y fun - ny way, We'l.

The third system of musical notation. It continues the melody and accompaniment. A dynamic marking of *mf* is placed below the first measure of the treble staff.

The fourth system of musical notation. It continues the melody and accompaniment. A dynamic marking of *f* (forte) is placed above the final measure of the treble staff.

{ d : d, r | m : m, f | s : s | f : m, f | s : s, l | m : d | r : - | d : s |
 tail up - right - a fur - ry mass— They nib - ble 'nuts all day. O,

The fifth system of musical notation. It continues the melody and accompaniment. A dynamic marking of *f* is placed above the final measure of the treble staff.

{ | d¹ : d¹ | t : l. s | l : s. m | s : m. r | d : r. m | r : - . d | d : - | d : s
 p'raps they'll jump from tree to tree With-out a thought of dan - ger; Their

{ | d¹ : d¹ | t : l. s | l : s. m | s : m. r | d : r. m | r : d. m | r : - | d ||
 branch-brown coats are hard to see To the eye of a foe or a stran - ger.

2. 'Tis winter now, and the days are cold,
 And the squirrels are all sleeping
 Near the trunk of a tree that is strong and old,
 From the storm all safely keeping.
 The day is bright, our friends wake up
 And seek their hidden treasure
 Of nut or berry or acorn-cup,
 Then fall asleep at leisure.

Directions.—*Verse 1.* Some children chosen as squirrels, others as trees (beech, chestnut, and others).

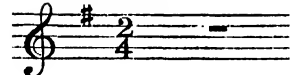
Verse 2. Squirrels sleep. Then wake up and search imaginary hiding-places for nuts. Then return to nests and sleep again.

Game 29.—THE TIMID SNAIL

(Page 235)

Moderato.

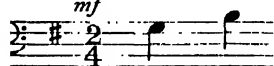
mf



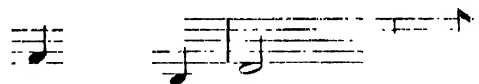
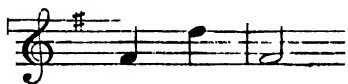
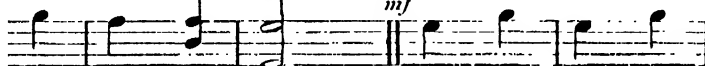
Key G || m : s₁.l₁ | d : - .l₁ ;
1. Hold hands and make a



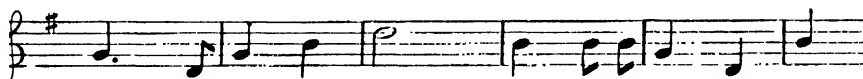
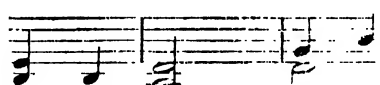
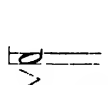
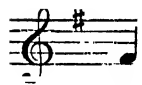
mf



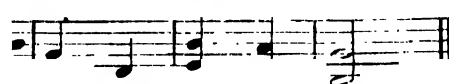
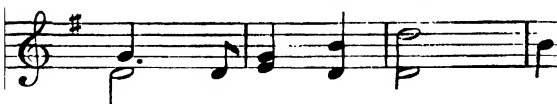
mf



|| t₁ : s | t₁ : - | l₁ : l₁.l₁ | l₁ : t₁ | l₁ : m | s₁ : - | d : m.m |
ti - ny snail; Here is the head, and there the tail. Look on the



|| d : - .s₁ | d : m | s : | m : m.m | d : s₁ | m : r | d
horns to find his eyes; See how the ten - der leaves he spi



2. When he is frightened, quickly then
He creeps into his shell again,
Fastens with slime his shell-house door,
Makes himself safe till danger's o'er.
3. Now see him creep into his house,
Quieter far than any mouse;
For winter time is coming on,
When all the fresh green leaves are gone.

Directions.—*Verse 1.* Children stand in single file behind each other in order of size—taller ones first. They place hands on each other's shoulders. The first child thrusts out his arms and extends both his forefingers (horns). He moves about with a winding motion as if searching for food. The children follow him.

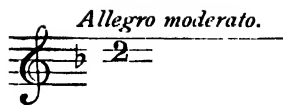
Verse 2 The teacher frightens the snail by clapping her hands. The snail winds inwards in a spiral. After a time the snail unwinds and slowly creeps across the floor.

Verse 3. Actions as in verse 2.

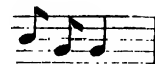
Game 30.—SEED TRAVELLERS

(Page 244)

Old Tune.

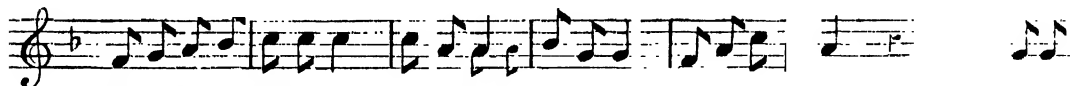
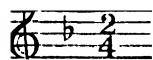


mf



Key F || s . m : m | f . r : r

1. Ma - ple boats! ma - ple boats!



|| d . r : m . f | s . s : s | s . m : m | f . r : r | d . m : s . s | m : | r . r : r }

Once we grew up - on a tree Wrapped in-side dain - ty coats, Two seed ba-bies we, Soon the soft wind



mf



|| r . m : f | m . m : m . m | m . f : s | s . m : m | f . r : r | d . m : s . s | m :

whis-p'ring round Sent us float-ing to the ground. Here we play, All the day, Fair - y ma - ple boats.



2. Thistledown! thistledown!
 Tiny bits of fairy fluff,
 From the thistle's snowy crown,
 Dainty silky stuff.
 Little seeds with soft white hair,
 Growing, blowing everywhere,
 Soft and white,
 Fairy light,
 Fluffy thistledown!

3. Burdock weeds! burdock weeds!
 Growing 'mong the roadside grass,
 Cunning little baby seeds
 Cling to those who pass.
 Have no sails, so cannot float
 Like the fairy maple boat;
 Want a ride
 Far and wide,
 Clever burdock weeds.

Directions.—Arrange the children in a ring. About eight or ten should be chosen for each kind of seed mentioned.

Verse 1. Some pairs of boys face each other, and, holding arms, sit on each other's feet. They move across the ring gently in imitation of sailing boats. The ring-children can sway about with arms stretched out representing the seeds flying down.

Verse 2. Children chosen for thistledown trip lightly across the floor, while the ring-children pretend to blow them about. If possible, provide each of the ring-children with a thistle head, so that they may blow the seeds among the thistledown children.

Verse 3. The "burrs" crouch among the ring-children, who represent the wayside grass. Several foot passengers pass along the roadside; the burrs clutch their dresses and walk along with them.

Game 31.—AUTUMN TIME

(Page 252)

Words adapted

Allegretto.

Key G { . d | d . d : l | t | d : s | . s | d . m : r . d r
r. The green leaves change their col - ours, And then come tum - bling do

{ s . s : f . m | r : l | . l | l | s | . f : m . r | d
co - ver up the a corns With a blan - ket warm and lit

2. The furry squirrels huddle
 Inside a hollow tree;
The tiny birds are flying
 To lands across the sea.
3. The twigs in apple orchards
 With fruit are bending low;
The seeds from off the tall trees
 Are flying to and fro.

Directions.—Certain children chosen for trees. Round these are grouped a "squirrel", "birds", and "winged seeds".

Verse 1. The tree-children flutter their fingers. Line 3—They smooth the blanket with hands held down, palms facing the ground.

Verse 2. The squirrels scud about the wood, and then come back to the trees to huddle. Line 3—The birds fly away to a far corner of the room.

Verse 3. The tree-children let their arms droop as if weighed down with fruit. The seed-children fly to and fro among the trees.

Game 32.—THE LEAVES' PLAYTIME

(Page 261)

Words adapted from poem in *Palmerston Reader II.*

Allegretto.

mf

Key G | d : d : d | l₁ : t₁ : d | t₁ : — : l | s : — : — | f : f : f | r : r : r | t₁ : — : l₁ | s₁ : — :

1. "Dear lit - tle leaves, I'm the wind, hoo - ray! Come o'er the mea-dows with me and play.

| d : d : d | l₁ : t₁ : d | t₁ : — : l | s : — : s₁ | f : f : f | r : — : s₁ . s₁ | l₁ : — : t₁ | d : — : — ||

Put on your dress-es of red and gold, For sum-mer has gone and the days grew cold."

2. "Yes, autumn wind, we hear your low call;
Down we come fluttering one and all.
Over the brown fields we'll dance and fly,
Twisting and twirling, now low, now high."
3. "Dancing and fluttering the little leaves went;
I had to call them, but they were content.
Soon, fast asleep in their earthy beds,
My snow lays a coverlet over their heads."

Directions.—*Verse 1.* The "wind" flies round the ring and touches those "leaves" with whom he wants to play.

Verse 2. The chosen leaves flutter after the wind and trip and dance until—

Verse 3. A boy with bent head, representing Winter, comes slowly into the ring. He beckons to the leaves and motions to them to lie down. The leaves quietly sink down, and the old man Winter sings, "I had to call them", &c. The remaining ring-children make the falling snow-flakes with their fingers.

Game 33.—RED-BREAST AND RED-CHEEKS

(Page 269)

Allegro moderato.

Old Tune.

The musical score is written for a vocal part and piano accompaniment. The key signature has one flat (F major), and the time signature is 3/4. The tempo is marked 'Allegro moderato.' and the piece is identified as an 'Old Tune.' The score consists of several systems of music. The vocal line is written in a single staff, and the piano accompaniment is written in two staves (treble and bass clef). The lyrics are written below the vocal line. The score includes dynamic markings such as *mf* (mezzo-forte) and *f* (forte). The lyrics are as follows:

Key F : *m . f* | *s* : *m* : *m* | *m* : *r* : *r . m* | *f* : *r* : *l* | *s* : *m . f* |

1. "Lit - tle brown bird so lone - ly, All your play - mates have flown Tell us

| *s* : *m* : *m* | *m* : *r* : *r . m* | *f* : *t* | : *t* | | *d*

why you are fly - ing Round the hedge all a - lone

2. "Dear rose trees, I'm hungry;
My dinner I seek.
Can't you spare me one red hip
With a bright scarlet cheek?"

3. "Little brown bird so lonely
Shall have what he needs,
He'll eat the chick only,
And scatter the seeds."

Directions.—*Verse 1.* The lonely bird flies round about and in and out of the ring (hedge). The hedge-children each hold a rose hip (specimen used for nature lesson will do).

Verse 2. The bird-child replies, and looks round the ring for his favourite.

Verse 3. While ring-children sing this the bird-child shows his choice by picking the hip held by that child. They change places, and the new bird-child flies round the ring. The whole is repeated.

Game 34.—THE MERRY WOODCUTTERS

(Page 279)

Animato.

mf

Key D || d : — : d | m : — : l | s : — : d | s : — : — | f : — : l | s : — : m | r : — : d | r : — : —
 1. Mer - ry wood - cut - ters are we, Hap - py heart - ed as can be;

mf

{ d : — : r | m : — : f | s : — : d | s : — : — | l : — : d | s : — : m | s : f : r | d : — : — |
 We are look - ing through the wood, For a strong tree straight and good.

2. Get a rope and bind it well—
What would happen if it fell?
Bring the saw and hold it tight,
Pull and push with all our might.
3. Take care! soon the tree will fall;
Down will come the monster tall.
Crack! 'tis coming! hear the sound
As it crashes to the ground.
4. Lop the branches every one;
Then, when every twig is gone,
Bring Old Dobbin up the hill;
He will drag it to the mill.

Directions.—*Verse 1.* A few children walk through the wood (a circle of children) shouldering imaginary axes and carrying a saw (a pointer will serve). Their leader selects a tree and stands before it.

Verse 2. The woodcutters pretend to bind the tree, and then use the saw. They hold the saw (a pointer) at each end horizontally.

Verse 3. The woodmen prepare to stand back, and at line 3 they spring aside quickly.

Verse 4. While the branches are being lopped, one boy goes for the horse—Dobbin (can be represented by another boy). The children tie the log to the horse, and follow it as it is dragged through the wood.

N.B.—The tree should be imaginary. Do not choose a child to represent it, or there will be a tendency towards rough play.

Game 35.—THE NORTH WIND DOTH BLOW

(Page 287)

Old Tune, Words adapted.

Allegro moderato.

mf

Ped.

mf

p

mf

Key G

Key G : s₁ | d : d : d | d : — : d | r : r : r | r : — : f | m : f : m | r : d : t₁ | d : : d | d : : s₁ }

1. The north wind doth blow, And down falls the snow, And what will the bare earth do then? Poor thing! With a

mf

p

mf

p

| d : d : d | d : — : d | r : r : r | r : — : f | m : f : m | r : l₁ : t₁ | d : — : d | d

white blan-ket warm We'll keep her from harm, Till spring-time comes back once a - gain. Poor thi

p

2. The north wind doth blow,
 And down falls the snow,
And what will the children do then? Poor things!
 They'll hop, skip, and run,
 With snowballing fun,
Till springtime comes back once again. Poor things!

3. The north wind doth blow,
 And down falls the snow,
And what will the robin do then? Poor thing!
 We'll throw him some bread,
 And keep him well fed,
Till springtime comes back once again. Poor thing!

Directions.—Verse 1. The children stand in a ring and shudder as if with cold. They hold their hands above their heads and let them fall slowly, twirling their fingers to represent falling snow. All look sadly towards the ground. Line 4—The children hold hands down in front, palms downwards. They move their hands in a circle as if spreading blanket.

Verse 2. Lines 1 and 2 as in verse 1. Some boys and girls stand outside the ring, peeping between the ring-children as if looking wistfully out of the window at the snow. Line 3—They spring out and pretend to throw snowballs.

Verse 3. A tiny child with red pinafore, scarf, or vest hops into the ring, and appears to be searching in vain for food. The ring-children pretend to throw crumbs, and robin hops to pick them up.

Game 36.—ROBIN'S BREAKFAST

(Page 297)

Allegretto.

mf

mf

mf

Key G { m . m : d . d | l | : s | l . d : l . d | r
1. Sau - cy Rob - in Red breast, Hop - ping o'er the snow

mf

{ m . s : l . m | s . f : d . l | s | : r
Look - ing for his break - fast, Search - ing high and

2. Here comes Mrs. Robin;
She is hungry too.
In this wintry weather
What can birdies do?
3. All the trees are leafless,
Berries hid with snow;
And the ground is frozen:
Where can birdies go?
4. Nellie, get the basket,
Gather up the crumbs;
We will feed the birdies
Till the springtime comes.

Directions.—This game may be played in one large group or several smaller ones.

Verse 1. A boy with a red jersey or scarf hops about inside a garden (a ring of children, who imitate falling snow with their fingers).

Verse 2. A little girl joins Cock Robin, and they both search about helplessly for food.

Verse 3. Ring-children look questioningly at each other, as they ask: "Where can birdies go?" They shake their heads sadly.

Verse 4. A little girl comes into the garden and scatters crumbs. The robins pick them up greedily and then fly off.

Game 37A.—EVERGREENS

(Page 307)

F. Tristram, in *Kindergarten Room* (Blackie).

Tune—"The Wearing of the Green".

Moderato.

mf *cres.*

mf

Key E \flat : d . r | m . m : m . m | m . s : s . m |

When win-ter's here, so chill and drear, And

mf

cres. *mf*

{ m . r : r . r | r : - . s | l . f : d . l | l . s : m . d | r . d : d . d | d : d . r }

snow lies on the ground; When not a sin-gle bud or flower Can an-ywhere be found, A ven-

cres. *mf*

cres. *mf*

{ m . m : m . m | m . s : s . m | m . r : r . r | r : - . s | l . f : d . l | l . s : m . d }

trees are bare and leaf - less, And blasts are cold and keen, Then wel-come, oh! so wel-come, Is the

cres.

f

|| r . d : d . d | d : d | t | l . l : s . m | s : d . r | m . r : m . f | m : d | t
 har - dy e - ver - green. Oh! we love the e - ver - green, the har - dy e - ver - green; Its

f

mf

|| l . l : s . m | s : d . m | r . d e : r . m | r : d . r | m . m : m . m | m . s : s . m }
 leaves 't will keep when flowers sleep. The har - dy e - ver - green. The hol - ly and the i - vy trees He-

mf

rall.

|| m . r : r . r | r : - . s | l . f : d | l | l . s : m . d | r . d : d . d | d
 deck with gloss - y sheen; The lau - rel, pine, and fir - tree, too, Are all called "e - ver - green".

rall.

Directions.—This is to be played like "Oranges and Lemons", i.e. two girls, one concealing an ivy and the other a holly leaf, hold hands and form an arch, under which the other children march in a line, singing the above verse. The last child is always captured, and asked her choice of ivy or holly, taking her place behind whichever girl has the particular shrub she has chosen. The game ends with a tug-of-war between the holly and ivy lines.

Game 37B.—PRICKLY HOLLY

(Page 307)

Vivace.

Key C ♯ | d : t | m : s | t : — | t : — | r : m | f : s | l

1. We are mer - ry chil - dren, Come to gath - er hol

|| d : m | t : l | s : m | r : m | f : s | l : m | r : d : —

Moth - er says she wants to hang it In the house, how jol ly!

2. See! this is a beauty!
Bright with many a berry;
Mother said: "Bring quite a handful
Make the house look merry."
- 3 "I will scratch you, children,
With my sword leaves prickly,
If you try to steal my branches.
Run away now, quickly!"
4. Leave this prickly holly;
Here is ivy clinging.
Gather sprigs of shining dark leaves;
Off we go home singing.

Directions.—Verse 1. The children walk through the forest. Groups of tall boys with outspread arms are the trees. The evergreen-gatherers pretend to pull branches of green and put them in pinafores, baskets, &c.

Verse 2. They point admiringly towards a tall girl (holly bush), and are just about to pluck the branches, when

Verse 3. She sings this verse, and points her fingers outwards in a jerky manner. She looks very threateningly at the children.

Verse 4. They turn away towards another child (ivy bush), and, after gathering ivy, they all trip out of the wood in twos and threes, holding arms as if they were loaded with evergreens.

Game 38. —CHRISTMAS EVE

(Page 316)

Tune—"Jingle Bells", by J. Pierpont.

Allegro moderato.

mf

Key G { | s | . m : r . d | s | : . s | }
1. Christ-mas Eve is here, And

mf

{ | s | . m : r . d | l | | l | . f : m . r | t | | s . s : f . r | m }
we go off to bed, As we climb the stairs, Nods each sleep-y head.

s | . m : r . d | s | | s | . m : r . d | l | | l | . f : m . r | s . s : s }
Take our stock-ings off, Hang them in a row, Then jump quick-ly in - to bed

f CHORUS.
{ | l . s : f . r | d | | m . m : m | m . m : m | m . s : d . , r | m : — }
Off to sleep, heigh-ho! Jin - gle bells, jin - gle bells, Jin - gle all the way,

f

{ f . f : f . , f | f . m : m | m . r : r . d | r . s : | m . m : m | m . m : m }
 San - ta Claus will come a - long, Rid - ing in his sleigh. Jin - gle bells, jin - gle bells,

{ m . s : d . , r | m : - . f | f . f : f . , f | f . m : m . , m | s . f : m . r | d : }
 Jin - gle all the way, Hur - rah for good old San - ta Claus! Hur - rah for Christ - mas Day!

2. "All the boys and girls,
 I think, are fast asleep;
 Time for us to start
 Through the snow so deep.
 Come up steeds! heigh-ho!
 Make the sleigh bells ring;
 Dashing, dashing o'er the snow,
 Ring a ring! ding! ding!"
Chorus—Jingle bells, &c.

3. "Yes, they're fast asleep,
 So I must not be slow;
 Fill each stocking up
 From the top to toe.
 Now I must be off
 Up the chimney flue;
 Other little boys and girls
 Want old Santa too."
Chorus—Jingle bells, &c.

Directions.—*Verse 1.* Four or five children sitting in a circle get up slowly and pretend to climb the stairs (lines drawn with chalk on the floor). When they reach the "bedroom" they pretend to pull shoes off and hang their stockings on the bed rail.

Chorus is sung by the remaining boys, who are Santa's horses. If tiny bells are fastened to their coats the effect will be quite festive. The girls form Santa's sleigh. They join in the chorus.

Verse 2. Santa Claus (a bigger boy) steps into his sleigh, and, taking up the reins, urges his steeds on. The horses canter round the room, the sleigh following behind. *Chorus* as before.

Verse 3. Santa steps up to the sleeping children and looks at them intently. He throws off the sack he carries on his back, and pretends to fill the stockings. When full, he steps into his sleigh and drives off. *Chorus* as in verses 1 and 2.

Game 39.—MAKING TEA

(Page 326)

Allegretto.

Key F || d : - : m | s : - : s | d : - : m | s : - : f : - : t₁ | t₁ : - : t₁ | t₁ : - : - | - : - :
 1. Put the ket - tle on the fire— Near - ly time for tea.

|| r : - : f | l : - : l | r : - : f | l : - : - | s : - : m | m : - : m | m : - : - | - : - : -)
 Fa - ther will be com - ing soon, Hun - gry as can be.

d : - : m | s : - : s | d : - : m | s : - : - | f : - : t₁ | t₁ : - : t₁ | t₁ : - : - | - : - :
 Spread the white cloth smooth and straight; Press the folds out so.



2. In each saucer put a spoon,
Shining bright and clear;
Then a small plate for each one—
Dad will soon be here.
Bring the sugar basin now,
And the cream jug too;
Mother, let us have some cake;
Please, dear mother, do!

3. Cut the bread and butter; now
Put it on the plate.
All is ready; Father comes,
Not one minute late.
Hark, the water's boiling now;
Mother brews the tea;
Put the chairs all round and sit
Happy as can be.

Directions.—This game is most suitable for the classroom. The teacher's table can be used for tea-table. Real crockery and other articles should be used. Only a few children take part in the laying of the table, but the game can be played any number of times to give each child a part. The words suggest the actions. The eldest girl can be Mother, who gives her consent to cake for tea and brews the tea. A big boy can be Father, who, coming in, pats the children's heads.

Game 40.—IN THE MINE

(Page 336)

Allegro non troppo.

Key F { m . ε : l_i . t_i | d . r : m . f | s : d^l

[Vers. J. A] i. Sing a - bout the big mine, with its chim

{ s : - | f . l : s . m | r . d : t_i . l_i | r : l_i | r : - | m . s_i : l_i . t_i

tall, And its tun-nels dark with-out a light af all. We are tus - y

min - ers with a spade and pick, Knock - ing with our ham - mers at the

l, click, click! Cling, clang! cling, clang! cling, clang!

2. Sometimes it is hardest when the coal is low;
We lie on our side and pick away just so.
Then we call the pony-truck and fill it full,
Send it down the rail and tell the horse to pull.
Cling, clang! cling, clang! cling, clang!
3. A signal then is given to the engineman,
Who sends an empty cage as quickly as he can.
The coal is emptied in the cage, then "Right away!"
'Tis carried up at last into the light of day.
Cling, clang! cling, clang! cling, clang!

Directions.—*Verse 1.* The children are arranged in a ring; they pretend to dig. Some may be sitting, others standing. (If the children are allowed to change their attitudes freely, they will enter into the spirit of the game much better than if they were told just what to do.)

Verse 2. The pony wagon is represented by a boy (the pony), and one or two tiny children (the truck). The miners shovel the coal into the truck, which, when full, moves down the rails (two chalk lines on floor).

Verse 3. At the foot of the shaft, also marked out in chalk, a "man" gives the signal "Right away!" The miners look up as if following with their eyes the cage as it is carried up the shaft.

Game 41.—PICTURES IN THE FIRE

(Page 347)

Allegretto.

Key G { s : — : s | m : — : d | t₁ : — : t₁ | t₁ : — : — | f₁ : s₁ : l₁ | t₁ : — : f | m : — : — |
r. Close the door, and bring your chairs; Put play - things a - way.

{ s : — : s | m : — : d | t₁ : — : t₁ | t₁ : — : — | f₁ : s₁ : l₁ | t₁ : — : l₁ | s₁ : — : — |
Poke the fire and make it bright; 'Tis the close of day.

See, Bo - peep is walk - ing out, Look - ing for her sheep.

2. See Jack Horner, with his thumb
Poking in his pie;
And old Mother Goose is here,
Flying in the sky.
There is Tom, the piper's son,
Running with his pig;
These are Giant Killer Jack
And the Giant big.

3. There is Little Goldilocks,
And the Three Brown Bears.
Ah! 't will soon be time for bed,
Time to go upstairs.
It is jolly sitting here,
In the firelight red;
But it's eight o'clock, oh dear!
So 't is time for bed.

Directions.—This may be taken as an action song. Before the game choose certain children to represent the different characters. As each one is mentioned, he or she walks in front of class (or round the ring), acting his or her part. The class children imitate the characters as far as possible, but they remain in their places.

Game 42.—THE RABBITS

(Page 357)

Allegro.

mf

Key B♭ { | d . m | s | d
r. See the lit - tle

mf

mf

{ | t | . t | : . l | s | : f . f | m . m | r . f : t | . t | t | . t | : . l |
rab - bits so fright - ened and shy; They frisk a - bout quite gai - ly when

{ | s | : l | . f | m | d . m | s | d | t | . t | : . l | s | : f . f |
no one is nigh. Eat - ing and nib - bling the sweet dai - sies

|| f : . m | r . f : t₁ . t₁ | t₁ . t₁ : . l₁ | s₁ : l₁ . t₁ | d : —
 white, They have a jol - ly time from the morn - ing till night.

2. Here comes Farmer Jones with his terrible gun;
 His doggy, too, is with him, quite ready for fun;
 Quick to their burrows, just under the ground,
 The furry little rabbits will never be found.

Directions.—*Verse 1.* The rabbit-children sit on their heels with forefingers pointing at each side of their heads for the rabbits' long ears. They hop about in the meadow (a ring of children).

Verse 2. A big boy (the farmer) walks to the edge of the meadow and carries what represents a gun. A tiny boy (the dog) runs at his heels, barking. The rabbits begin to get frightened, and hop about in a scared manner when they see the farmer and his dog. Farmer Jones takes aim with his gun and shouts, "Pop!" At this the rabbits scud across the meadows and hide in their burrows (gaps between the hedge-children).

Game 43.—PET PIGEONS

(Page 365)

Allegretto.

mf

Key F : s₁ | d : - : r | m : - : f | s : - : m | d : - : m | r : - : d | t₁ : - : d | r : - : t₁ | s₁ : - : s₁ }

1. A pig - eon house come let us make. The birds in - side are wide a - wake; So

{ | d : - : m | s : - : l | s : - : m | r : - : m | l₁ : - : t₁ | d : - : f | m : - : r | r : - : m | }

when we op - en wide the door, A - way , the pig - cons fly and soar, A -

dim. *rall.*

(r:l:d | t:m:r | d:- | :-:- | s:l:t | d:-:- | s:m:r | d:-:-)

way they fly and soar, Coo coo - roo.

dim. *rall.*

Ped. *

2. Oh, see the pigeons in the sky!
They fly around, now low, now high.
See, each one spreads its soft grey wings,
And then its own sweet song it sings,
Its own sweet song it sings:
Coo-roo, coo-roo.
3. The stars are twinkling in the sky;
The tired pigeons homeward fly.
We'll shut the door and quiet keep
Till all the birdies go to sleep,
The birdies go to sleep.
Coo-roo, coo-roo.

Directions.—Verse 1. The children stand in a ring (pigeon-cote) and hold hands. Several smaller ones (pigeons) are inside. The door is opened by two children unclasping hands, and thus forming a gap. The "birds" fly out and round the ring outside during this verse and the next.

Verse 3. The pigeons fly in through the cote door and crouch down with left hand crossing the breast and resting on right shoulder. The right arm is bent over head, and touches the left shoulder. This represents the tucking of head beneath the wing. They close eyes as the ring-children sing very softly "The birdies go to sleep".

